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OM protein - protein search, using sw model

Run on: August 29, 2005, 20:16:37 ; Search time 163 Seconds
(without alignments)
173.212 Million cell updates/sec

Title: US-10-622-134-2
Perfect score: 392
Sequence: 1 HPGPSACCFRVTKKISFQ.....KKMVDAAKYLIDISQTTKP 73

Scoring table: BLOSUM62
Gapop 10.0 , Gapext 0.5

Searched: 2105692 seqs, 386760381 residues

Total number of hits satisfying chosen parameters: 2105692

Minimum DB seq length: 0
Maximum DB seq length: 2000000000

Post-processing: Minimum Match 0%
Maximum Match 100%
Listing first 45 summaries

Database : A_Geneseq_16Dec64:*

- 1: geneseqp1980s:*
- 2: geneseqp1990s:*
- 3: geneseqp2000s:*
- 4: geneseqp2001s:*
- 5: geneseqp2002s:*
- 6: geneseqp2003as:*
- 7: geneseqp2003bs:*
- 8: geneseqp2004s:*

Pred. No. is the number of results predicted by chance to have a score greater than or equal to the score of the result being printed, and is derived by analysis of the total score distribution.

SUMMARIES

Result No.	Score	Query Match	Length	DB ID	Description
1	392	100.0	73	2	AAR70252
2	392	100.0	96	2	AAW14991
3	392	100.0	96	5	ABB80899
4	392	100.0	96	5	ABB80906
5	392	100.0	96	8	ADR40237
6	377	96.2	96	5	AAW52442
7	375	95.7	93	2	AAR70251
8	371	94.6	70	5	ABB80910
9	371	94.6	70	8	ADR40244
10	362	92.3	73	2	AAW14230
11	330.5	84.3	70	5	AAO19998
12	330.5	84.3	70	8	ADJ66685
13	330.5	84.3	70	8	ADJ66688
14	248	63.0	74	7	ADC89677
15	247	63.0	74	3	AAW69023
16	247	63.0	74	5	AAO20001
17	247	63.0	74	5	AAO20008
18	247	63.0	74	5	ABB80912
19	247	63.0	74	5	AAO14141
20	247	63.0	74	7	ADJ42623
21	247	63.0	74	8	ADJ66688
22	247	63.0	74	8	ADJ66688
23	247	63.0	74	8	ADJ66688
24	247	63.0	74	8	ADJ66688
25	247	63.0	74	8	ADJ66688

26	247	63.0	97	2	AAW00667	Pancreas
27	247	63.0	97	2	AAW10089	Human eot
28	247	63.0	97	2	AAW14990	Human eos
29	247	63.0	97	3	AAW15794	Human che
30	247	63.0	97	5	ABG94303	Human eot
31	247	63.0	97	5	ABB80913	Human eot
32	247	63.0	97	5	ABG80615	Human che
33	247	63.0	97	7	ADC38694	Human bec
34	247	63.0	97	7	ADK17210	Human eot
35	247	63.0	97	8	ADR40248	Human ful
36	247	63.0	323	3	AAW69058	A chemoki
37	247	63.0	325	3	AAW69059	AAW69059 A chemoki
38	247	63.0	330	3	AAW69060	AAW69060 A chemoki
39	241	61.5	74	8	ADJ19902	Modified
40	234	59.7	74	8	ADR90676	Human eot
41	233.5	59.6	73	7	ADE80854	Botaxin c
42	233.5	59.6	73	7	ADE80877	Botaxin c
43	229.5	58.5	84	7	ADK17255	Mouse eot
44	229.5	58.5	96	7	ADK17286	Mouse eot
45	229.5	58.5	97	5	ABG94306	Mouse eot

ALIGNMENTS

RESULT 1	AAW00667	Pancreas
AAW0252	AAW10089	Human eot
ID	AAW0252 standard; protein; 73 AA.	
XX		
AC	AAW0252;	
XX		
DT	16-OCT-2003 (revised)	
DT	25-MAR-2003 (revised)	
DT	30-SEP-1995 (first entry)	
XX		
DB	Botaxin chemoattractant protein.	
XX		
KW	Botaxin; chemoattractant; inflammatory disease; inflammation; asthma;	
KW	rhinitis; eczema; macrophage; lymphocyte; neutrophil; mast cell;	
KW	connective tissue cell; vascular endothelial cell; eosinophil.	
OS	Cavia porcellus.	
XX		
PN	W09507985-A1.	
XX		
PD	23-MAR-1995.	
XX		
PF	14-SEP-1994; 94WO-GB002006.	
XX		
PR	14-SEP-1993; 93GB-00018984.	
PR	29-APR-1994; 94GB-00008602.	
XX		
PA	(NAME-) NAT HEART & LUNG INST.	
PA	(LUDW-) LUDWIG INST CANCER RES.	
XX		
PI	Williams TJ, Jose PJ, Griffiths-Johnson DA, Hsuan JJ;	
XX		
DR	WPI, 1995-131353/17.	
XX		
PT	Isolated chemoattractant protein, termed eotaxin - useful for treating	
PT	asthma and other inflammatory diseases.	
XX		
PS	Claim 6; Page 31; 50pp; English.	
XX		
CC	Botaxin is useful for treatment of asthma or other diseases with an	
CC	inflammatory component, especially accumulation of eosinophils, e.g.	
CC	rhinitis or eczema. Botaxin is obtainable from bronchoalveolar lavage	
CC	fluid of a subject after antigen challenge; from an inflammatory exudate	
CC	fluid or from an in vitro culture of macrophages, lymphocytes,	
CC	neutrophils, mast cells, airway cells, connective tissue cells, vascular	
CC	endothelial cells or eosinophils. (Updated on 25-MAR-2003 to correct PN	
CC	field.) (Updated on 16-OCT-2003 to standardise OS field)	
XX		

ID AB880906 standard; protein; 96 AA.
 AC AB880906;
 DT 08-OCT-2002 (first entry)
 DE Guinea pig eotaxin polypeptide.
 KM Eotaxin; eosinophil; chemotaxis; cytostatic; antiinflammatory; cardiac;
 KM antiallergic; immunosuppressive; antiasthmatic; antiparasitic; histamine;
 KM dermatological; vasotropic; gene therapy; antianaphylactic; guinea pig.
 OS Cavia sp.
 XX
 FH Key Location/Qualifiers
 FT Peptide 1..23
 FT /note= "signal peptide"
 FT Protein 24..96
 FT /note= "mature protein"
 XX
 PN US6403782-B1.
 PD 11-JUN-2002.
 PF 04-AUG-1999; 99US-00366887.
 PR 22-JUN-1995; 95US-0000449P.
 PR 01-SEP-1995; 95US-00522713.
 XX
 PA (HARD) HARVARD COLLEGE.
 PA (GENO) GEN HOSPITAL CORP.
 XX
 PI Luster AD, Leder P, Rothenberg M, Garcia E;
 DR WPI; 2002-565447/60.
 DR N-PEDB; ABN86332.
 XX
 PT New DNA encoding murine, guinea pig or human eotaxin polypeptides, useful
 PT for treating inflammation and tumorigenesis and in anticancer gene
 PT therapy.
 XX
 PS Claim 2; Fig 7; 42pp; English.
 XX
 CC The invention relates to polynucleotides encoding murine, guinea pig or
 CC human eotaxin polypeptides. The eotaxin polynucleotides are useful for
 CC modulating eosinophil chemotaxis, for increasing eosinophil chemotactic
 CC events, and for improving prognosis with tumours in patients. They are
 CC also useful for treating inflammation and tumorigenesis, and for
 CC reducing inflammation and cytotoxic damage caused by eosinophils, for
 CC e.g. during asthmatic reactions, eosinophilic pneumonia and allergic
 CC diseases, inflammatory bowel diseases, atopic dermatitis, urticaria,
 CC vasculitis, parasitic infections and eosinophil cardiac diseases. The
 CC eotaxin polynucleotides are also useful for modulating histamine release
 CC by modulating eotaxin activity or expression during anaphylaxis,
 CC urticaria and allergic reactions. They are useful for detecting and
 CC monitoring eosinophil mediating conditions, and in anti-cancer gene
 CC therapy. The present sequence represents the guinea pig eotaxin
 CC
 XX
 SQ Sequence 96 AA:

Query Match 100.0%; Score 392; DB 5; Length 96;
 Best Local Similarity 100.0%; Pred. No. 2.7e-38;
 Matches 73; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 1 HFDIPSACCFRVTKKISFQRLKSKYKLTSSKCPQTAIFYEIKPDKMICADPKKKWQDA 60
 DB 24 HFDISACCFRVTKKISFQRLKSKYKLTSSKCPQTAIFYEIKPDKMICADPKKKWQDA 83
 QY 61 KYILDQISQTKP 73
 DB 84 KYILDQISQTKP 96

RESULT 5
 ADR40237
 ID ADR40237 standard; protein; 96 AA.
 AC ADR40237;
 DT 04-NOV-2004 (first entry)
 DE Guinea pig eotaxin protein.
 KM Guinea pig; eotaxin; chemokine; chemotactic; eosinophil; tumour;
 KM Hodgkin's lymphoma; plasmacytoma; lung carcinoma; melanoma; sarcoma;
 KM inflammation; cytotoxic damage; asthma; eosinophilic pneumonia;
 KM chronic obstructive pulmonary disease; cystic fibrosis; Crohn's disease;
 KM ulcerative colitis; atopic dermatitis; allergic conjunctivitis.
 XX
 XX Cavia porcellus.
 OS
 FH Key Location/Qualifiers
 FT Peptide 1..23
 FT /note= "Signal peptide"
 FT Protein 24..96
 FT /note= "Mature eotaxin"
 FT Region 48
 FT /note= "Claimed in claim 6"
 FT Region 76..78
 FT /note= "Claimed in claim 6"
 XX
 PN US6780973-B1.
 PD 24-AUG-2004.
 PF 02-MAR-2000; 2000US-00517204.
 PR 22-JUN-1995; 95US-0000449P.
 PR 01-SEP-1995; 95US-00522713.
 XX
 PA (HARD) HARVARD COLLEGE.
 PA (GENO) GEN HOSPITAL CORP.
 XX
 PI Luster AD, Leder P, Rothenberg M, Garcia E;
 DR WPI; 2004-649107/63.
 XX
 PT New substantially pure eotaxin polypeptide, useful for improving
 PT prognosis in patients with tumours such as Hodgkin's lymphoma and sarcoma,
 PT or for reducing inflammation and cytotoxic damage caused by eosinophils.
 XX
 PS Claim 2; SEQ ID NO 16; 43pp; English.
 XX
 CC The invention relates to a substantially pure eotaxin polypeptide (a
 CC chemokine) comprising mouse (ADR40228), Guinea Pig (ADR40237 and Human
 CC (ADR40248) eotaxin and having chemotactic activity capable of causing an
 CC increase in the number of eosinophils in target tissue by 20% or more
 CC relative to untreated control tissue of similar type. Also included is a
 CC substantially pure eotaxin polypeptide comprising an amino acid sequence
 CC that has 90% or more sequence identity with the above proteins, and
 CC encoded by a nucleic acid that hybridises under high stringency
 CC conditions with ADR40227, ADR40236 or ADR40247. The high stringency
 CC conditions involves hybridising a blot in 50% formamide, 10% dextran
 CC sulphate, 5X saline sodium citrate (SSC), 1X Denhardt's solution (0.0002%
 CC (w/v) polyvinylpyrrolidone, 0.0002% (w/v) bovine serum albumin (BSA),
 CC 0.0002% (w/v) Ficoll 400), 1% (w/v) sodium dodecyl sulphate (SDS), 100
 CC microgramme/ml denatured herring sperm DNA, and 20 mM Tris at 42 deg C
 CC and washing the blot in 0.2X SSC, 0.5% SDS at 65 deg C. The eotaxin
 CC polypeptide is useful for increasing eosinophils in target tissue by 20%
 CC or more relative to untreated control tissue of similar type. It is
 CC useful for improving prognosis in patients with tumours (e.g. Hodgkin's
 CC lymphoma, plasmacytoma, lung carcinoma, melanoma, or sarcoma) or for
 CC reducing inflammation and cytotoxic damage (e.g. asthmatic reactions,
 CC eosinophilic pneumonia, chronic obstructive pulmonary disease, cystic
 CC fibrosis, Crohn's disease, ulcerative colitis, atopic dermatitis or
 CC allergic conjunctivitis) caused by eosinophils. The mouse eotaxin gene is

CC located on chromosome 11. The present sequence represents Guinea pig
 CC eotaxin.
 XX
 SO Sequence 96 AA;

Query Match 100.0%; Score 392; DB 8; Length 96;
 Best Local Similarity 100.0%; Pred. No. 2,7e-38;
 Matches 73; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

OY 1 HPGIPSAACCFRVTKKISFORLKSFKYKIIITSSKCPQTALVFEIKPDKMICADPKKKWVODA 60
 DB 24 HPGIPSAACCFRVTKKISFORLKSFKYKIIITSSKCPQTALVFEIKPDKMICADPKKKWVODA 83

OY 61 KKYLDQISQTTKP 73
 DB 84 KKYLDQISQTTKP 96

RESULT 6

AAMS2442
 ID AAMS2442 standard; protein; 96 AA.

AC AAMS2442;

DT 03-JUN-2002 (first entry)

DE HIV_Nef1 fusion protein #9.

XX Selenoprotein; HIV; Ebola virus; cancer; immune system disorder.

XX Rattus sp.

XX US6303295-B1.

XX 16-OCT-2001.

XX 12-JUN-1996; 96US-00679493.

XX 14-JUN-1995; 95US-0001203P.

XX 01-SEP-1995; 95US-0003112P.

XX (UTGE-) UNIV GEORGIA RES FOUND INC.

XX Taylor EW, Nadiपालि RG, Ramanathan CS;

XX WPI; 2002-024734/03.

XX New selenoprotein for use in detecting certain viruses, e.g. human
 PT immunodeficiency virus (HIV) or Ebola, cancer and immune system
 PT disorders.

XX Disclosure; Col 73-76; 140pp; English.

XX The present invention relates to selenoproteins encoded in the genome of
 CC a virus, where the coding sequence of the selenoprotein is genetically
 CC engineered for expression in a nucleic acid construct. The invention also
 CC discloses a method for identifying selenoprotein coding sequences, for
 CC detecting certain viruses (e.g. HIV or Ebola), cancer and immune system
 CC disorders. The present sequence was used to illustrate the invention

XX Sequence 96 AA;

Query Match 96.2%; Score 377; DB 5; Length 96;
 Best Local Similarity 97.3%; Pred. No. 1.6e-36;

Matches 71; Conservative 0; Mismatches 2; Indels 0; Gaps 0;

OY 1 HPGIPSAACCFRVTKKISFORLKSFKYKIIITSSKCPQTALVFEIKPDKMICADPKKKWVODA 60
 DB 24 HPGIPSAACCFRVTKKISFORLKSFKYKIIITSSKCPQTALVFEIKPDKMICADPKKKWVODA 83

OY 61 KKYLDQISQTTKP 73
 DB 84 KKYLDQISQTTKP 96

RESULT 7

ID AAR70251
 AAR70251 standard; protein; 73 AA.

AC AAR70251;

DT 25-MAR-2003 (revised)

DT 30-SEP-1995 (first entry)

DE Eotaxin chemoattractant protein.

XX Eotaxin; chemoattractant; inflammatory disease; inflammation; asthma;

XX rhinitis; eczema; macrophage; lymphocyte; neutrophil; mast cell;

XX connective tissue cell; vascular endothelial cell; eosinophil.

XX Cavia porcellus.

XX Key Location/Qualifiers

FT Misc-difference 54 /note= "Unidentified amino acid."

FT Misc-difference 55 /note= "Unidentified amino acid."

FT Misc-difference 70 /note= "Unidentified amino acid."

XX WO9507985-A1.

XX 23-MAR-1995.

XX 14-SEP-1994; 94WO-GB002006.

XX 14-SEP-1993; 93GB-00018984.

XX 29-APR-1994; 94GB-00008602.

XX (NAHE-) NAT HEART & LUNG INST.

XX (LUDW-) LUDWIG INST CANCER RES.

XX Williams TJ, Jose PJ, Griffiths-Johnson DA, Huan JJ;

XX WPI; 1995-131353/17.

XX Isolated chemoattractant protein, termed eotaxin - useful for treating

XX asthma and other inflammatory diseases.

XX Claim 6; Page 31; 50pp; English.

XX Eotaxin is useful for treatment of asthma or other diseases with an
 CC inflammatory component, especially accumulation of eosinophils, e.g.
 CC rhinitis or eczema. Eotaxin is obtainable from bronchoalveolar lavage
 CC fluid of a subject after antigen challenge, from an inflammatory exudate
 CC fluid or from an in vitro culture of macrophages, lymphocytes,
 CC neutrophils, mast cells, airway cells, connective tissue cells, vascular
 CC endothelial cells or eosinophils. (Updated on 25-MAR-2003 to correct PN
 CC field.)

XX Sequence 73 AA;

Query Match 95.7%; Score 375; DB 2; Length 73;
 Best Local Similarity 95.9%; Pred. No. 2e-36;

Matches 70; Conservative 0; Mismatches 3; Indels 0; Gaps 0;

OY 1 HPGIPSAACCFRVTKKISFORLKSFKYKIIITSSKCPQTALVFEIKPDKMICADPKKKWVODA 60
 DB 1 HPGIPSAACCFRVTKKISFORLKSFKYKIIITSSKCPQTALVFEIKPDKMICADPKKKWVODA 60

OY 61 KKYLDQISQTTKP 73
 DB 61 KKYLDQISQTTKP 73

RESULT 8

AB80910
ID ABB80910 standard; protein; 70 AA.
XX
AC ABB80910;
XX
DT 08-OCT-2002 (first entry)
XX
DE Guinea pig eotaxin mature polypeptide.
XX
KW Botaxin; eosinophil; chemotaxis; cytostatic; antiinflammatory; cardiac;
KW anti-allergic; immunosuppressive; antistatic; antiparasitic; histamine;
KW dermatological; vasotropic; gene therapy; antianaphylactic; guinea pig.
XX
OS
XX Cavia sp.
XX
XX US6403782-B1.
XX
XX 11-JUN-2002.
XX
XX 04-AUG-1999; 99US-00366887.
XX
XX 22-JUN-1995; 95US-0000449P.
XX PR 01-SEP-1995; 95US-00522713.
XX
XX (HARD) HARVARD COLLEGE.
XX PA (GENO) GEN HOSPITAL CORP.
XX
XX Luster AD, Leder P, Rothenberg M, Garcia E;
XX
XX WPI; 2002-565447/60.
XX
XX New DNA encoding murine, guinea pig or human eotaxin polypeptides, useful
XX PT for treating inflammation and tumorigenesis and in anticancer gene
XX PT therapy.
XX
XX PS Disclosure; Col 43-44; 42pp; English.
XX
XX The invention relates to polynucleotides encoding murine, guinea pig or
XX CC human eotaxin polypeptides. The eotaxin polynucleotides are useful for
XX CC modulating eosinophil chemotaxis, for increasing eosinophil chemotactic
XX CC events, and for improving prognosis with tumours in patients. They are
XX CC also useful for treating inflammation and tumorigenesis, and for
XX CC reducing inflammation and cytotoxic damage caused by eosinophils, for
XX CC e.g. during asthmatic reactions, eosinophilic pneumonia and allergic
XX CC diseases, inflammatory bowel diseases, atopic dermatitis, urticaria,
XX CC vasculitis, parasitic infections and eosinophil cardiac diseases. The
XX CC eotaxin polynucleotides are also useful for modulating histamine release
XX CC by modulating eotaxin activity or expression during anaphylaxis,
XX CC urticaria and allergic reactions. They are useful for detecting and
XX CC monitoring eosinophil mediating conditions, and in anti-cancer gene
XX CC therapy. The present sequence represents the guinea pig mature eotaxin
XX
SQ Sequence 70 AA;
Query Match 94.6%; Score 371; DB 5; Length 70;
Best Local Similarity 100.0%; Pred. No. 5.7e-36;
Matches 70; Conservative 0; Mismatches 0; Indels 0; Gaps 0;
OY 4 IPSACCFRVYNNKKSIFORLKSXYKIITSSKCPQTAVIFRIKPKDKMICADPKKKWVODAKKY 63
DB 1 IPSACCFRVYNNKKSIFORLKSXYKIITSSKCPQTAVIFRIKPKDKMICADPKKKWVODAKKY 60
OY 64 LDOIISQTKP 73
DB 61 LDOIISQTKP 70
RESULT 9
ID ADR40244 standard; protein; 70 AA.
XX
XX ADR40244;
XX
XX

DT 04-NOV-2004 (first entry)
XX
XX Guinea pig mature eotaxin protein.
XX
XX Guinea pig; eotaxin; chemokine; chemotactic; eosinophil; tumour;
XX KW Hodgkin's lymphoma; plasmacytoma; lung carcinoma; melanoma; sarcoma;
XX KW inflammation; cytotoxic damage; asthma; eosinophilic pneumonia;
XX KW chronic obstructive pulmonary disease; cystic fibrosis; Crohn's disease;
XX KW ulcerative colitis; atopic dermatitis; allergic conjunctivitis.
XX
XX Cavia porcellus.
XX
XX US6780973-B1.
XX
XX 24-AUG-2004.
XX
XX 02-MAR-2000; 2000US-00517204.
XX
XX 22-JUN-1995; 95US-0000449P.
XX PR 01-SEP-1995; 95US-00522713.
XX
XX (HARD) HARVARD COLLEGE.
XX PA (GENO) GEN HOSPITAL CORP.
XX
XX Luster AD, Leder P, Rothenberg M, Garcia E;
XX
XX WPI; 2004-649107/63.
XX
XX New substantially pure eotaxin polypeptide, useful for improving
XX PT prognosis in patients with tumors such as Hodgkin's lymphoma and sarcoma,
XX PT or for reducing inflammation and cytotoxic damage caused by eosinophils.
XX
XX PS Disclosure; SEQ ID NO 23; 43pp; English.
XX
XX The invention relates to a substantially pure eotaxin polypeptide (a
XX CC chemokine) comprising mouse (ADR40228), Guinea Pig (ADR40237 and human
XX CC (ADR40248) eotaxin and having chemotactic activity capable of causing an
XX CC increase in the number of eosinophils in target tissue by 20% or more
XX CC relative to untreated control tissue of similar type. Also included is a
XX CC substantially pure eotaxin polypeptide comprising an amino acid sequence
XX CC that has 90% or more sequence identity with the above proteins, and
XX CC encoded by a nucleic acid that hybridizes under high stringency
XX CC conditions with ADR40227, ADR40236 or ADR40247. The high stringency
XX CC conditions involves hybridizing a blot in 50% formamide, 10% dextran
XX CC sulphate, 5x saline sodium citrate (SSC), 1x Denhardt's solution (0.0002%
XX CC (w/v) polyvinylpyrrolidone, 0.0002% (w/v) bovine serum albumin (BSA),
XX CC 0.0002% (w/v) Ficoll 400), 1% (w/v) sodium dodecyl sulphate (SDS), 100
XX CC microgramme/ml denatured herring sperm DNA, and 20 mM Tris at 42 deg C
XX CC and washing the blot in 0.2X SSC, 0.5% SDS at 65 deg C. The eotaxin
XX CC polypeptide is useful for increasing eosinophils in target tissue by 20%
XX CC or more relative to untreated control tissue of similar type. It is
XX CC useful for improving prognosis in patients with tumours (e.g. Hodgkin's
XX CC lymphoma, plasmacytoma, lung carcinoma, melanoma, or sarcoma) or for
XX CC reducing inflammation and cytotoxic damage (e.g. asthmatic reactions,
XX CC eosinophilic pneumonia, chronic obstructive pulmonary disease, cystic
XX CC fibrosis, Crohn's disease, ulcerative colitis, atopic dermatitis or
XX CC allergic conjunctivitis) caused by eosinophils. The mouse eotaxin gene is
XX CC located on chromosome 11. The present sequence represents the mature
XX CC Guinea pig eotaxin.
XX
SQ Sequence 70 AA;
Query Match 94.6%; Score 371; DB 8; Length 70;
Best Local Similarity 100.0%; Pred. No. 5.7e-36;
Matches 70; Conservative 0; Mismatches 0; Indels 0; Gaps 0;
OY 4 IPSACCFRVYNNKKSIFORLKSXYKIITSSKCPQTAVIFRIKPKDKMICADPKKKWVODAKKY 63
DB 1 IPSACCFRVYNNKKSIFORLKSXYKIITSSKCPQTAVIFRIKPKDKMICADPKKKWVODAKKY 60
OY 64 LDOIISQTKP 73
DB 61 LDOIISQTKP 70

RESULT 10
AA14230
ID AA14230 standard; peptide; 73 AA.
XX
AC AA14230;
DT 29-JUL-1999 (first entry)
XX
DE Chemokine Eotaxin.
XX
KW Chemokine; immune response; monocyte chemoattractant protein-1; MCP-1;
KW chemokine-induced activity; inflammatory response; vascular indication;
KW haematopoietic cell-associated activity; tumour; coronary artery disease;
KW myocardial infarction; unstable angina pectoris; atherosclerosis; asthma;
KW vasculitis; lentiviral infection; low bone mineral density; suppressor;
KW parasitic infection; autoimmune disease; psoriasis; wound healing;
KW organ transplant rejection; rheumatoid arthritis; allergy; therapy;
KW arachidonic acid pathway.
XX
OS Homo sapiens.
XX
PN W09912968-A2.
XX
PD 18-MAR-1999.
XX
PE 11-SEP-1998; 98WO-US019052.
XX
PR 11-SEP-1997; 97US-00927939.
XX
PA (NEOR-) NEORX CORP.
XX
PI Grainger DJ, Tatalick LM, Kanaly ST;
XX
DR WPI; 1999-347124/29.
XX
PT New chemokine peptides and mimetics.
XX
PS Example 1; Page 128; 208pp; English.
XX
CC This sequence represents the chemokine Eotaxin. The invention relates to
CC chemokine peptides and mimetics, particularly derived from monocyte
CC chemoattractant protein-1 (MCP-1). The chemokine peptides and variants
CC and derivatives can inhibit or reduce or increase, or enhance chemokine-
CC induced activity. They can be used for increasing or enhancing an
CC inflammatory response, an immune response or haematopoietic cell-
CC associated activity at a tumour site. They can also be used for
CC preventing or inhibiting an indication associated with haematopoietic
CC cell recruitment or histamine release from basophils or mast cells. They
CC can also be used to modulate the chemokine-induced activity of
CC haematopoietic cells at a preselected physiological site, to treat a
CC vascular indication, e.g. coronary artery disease, myocardial infarction,
CC unstable angina pectoris, atherosclerosis, or vasculitis, lentiviral
CC infection or replication (e.g. HIV), low bone mineral density, a
CC parasitic infection in a vertebrate animal (e.g. malaria), an autoimmune
CC disease, to suppress tumour growth in a vertebrate animal, to prevent or
CC treat psoriasis in a mammal, to enhance wound healing, to prevent or
CC treat asthma, organ transplant rejection, rheumatoid arthritis or
CC allergy. They can also be used to inhibit a product or intermediate in
CC the arachidonic acid pathway and where leukotriene, thromboxane and/or
CC prostaglandin are inhibited and to prevent or inhibit an indication
CC associated with elevated TNF-alpha
XX
SQ Sequence 73 AA;
Query Match 92.3%; Score 362; DB 2; Length 73;
Best Local Similarity 91.8%; Pred. No. 6.9e-35;
Matches 67; Conservative 1; Mismatches 5; Indels 0; Gaps 0;

OY 61 KKYPDQISQTKP 73
DB 61 KKYPDQISQTKP 73
RESULT 11
AA019998
ID AA019998 standard; protein; 70 AA.
XX
AC AA019998;
XX
DT 24-MAY-2002 (first entry)
XX
DE 70-mer protein of the invention.
XX
KW Cytostatic; antibacterial; immunosuppressive; antipsoriatic; vulnery;
KW antiasthmatic; antiallergic; human chemokine beta4; chronic infection;
KW solid tumour; human chemokine beta10; auto-immune disease; psoriasis;
KW asthma; allergy; haematopoiesis regulation; wound healing; siltosis;
KW chronic inflammatory; infective disease; prostaglandin-independent fever;
KW bone marrow failure; histamine-mediated allergic reaction; sarcoidosis;
KW hyper-eosinophilic syndrome; lung inflammation; gene therapy.
XX
OS Unidentified.
XX
FH Key Location/Qualifiers
FT Misc-difference 55 /label= Xaa
FT /note= "Xaa is unknown"
FT Misc-difference 56 /label= Xaa
FT /note= "Xaa is unknown"
XX
XX US2002026044-A1.
XX
XX 28-FEB-2002.
XX
XX 03-MAR-1999; 99US-00261201.
XX
XX 23-AUG-1994; 94WO-US009484.
XX
XX 02-JUN-1995; 95US-00458355.
XX
XX (LIHH/) LI H.
XX (ADAM/) ADAMS M D.
XX
XX Li H, Adams MD;
XX
XX WPI; 2002-267534/31.
XX
XX Novel isolated chemokine beta4 and encoded polynucleotide, useful for
XX treating asthma, auto-immune diseases, and chronic infections.
XX
XX Disclosure; Page 18; 25pp; English.
XX
XX The invention relates to newly identified polypeptides and their encoding
XX polynucleotides, including their use and production. More specifically
XX the invention relates to an isolated human chemokine beta4 encoding
XX polynucleotide, comprising residues -24, or 1 to 72 of a 96 nucleotide
XX sequence, or residues -23 or 1 to 75 of a 98 nucleotide sequence, both
XX given in the specification, or a sequence capable of hybridising to them
XX and which is 70 % identical. The invention also relates to human
XX chemokine beta-10. The polynucleotides and polypeptides of the invention
XX can be used for treatment of disorders associated with human chemokine
XX beta-4. The polypeptides and polynucleotides can be used for treating
XX solid tumours, chronic infections, auto-immune diseases, psoriasis,
XX asthma, allergies, haematopoiesis regulation, and to promote wound
XX healing. The antagonists can be used to treat auto-immune diseases,
XX chronic inflammatory and infective diseases, histamine-mediated allergic
XX reactions, prostaglandin-independent fever, bone marrow failure,
XX siltosis, sarcoidosis, hyper-eosinophilic syndrome, and lung
XX inflammation. The polynucleotides of the invention can be used to treat
XX disorders by means of gene therapy. This sequence represents a 70-mer

CC Protein of the invention. NOTE: This protein sequence is not further
 CC defined in the specification
 XX
 SQ Sequence 70 AA;
 Query Match 84.3%; Score 330.5; DB 5; Length 70;
 Best Local Similarity 91.4%; Pred. No. 3.5e-31;
 Matches 64; Conservative 1; Mismatches 4; Indels 1; Gaps 1;
 QY 1 HPGIPSAACCFRVNT-KKISFQRLKSKYKITTSSKCPQTAIVFEIKDKMICADPKKKWVD 59
 DB 1 HPGIPSAACCFRVNTICKISFQRLKSKYKITTSSKCPQTAIVFEIKDKMICADPKKKWVD 60
 QY 60 AKKYLDQISQ 69
 DB 61 AKKYLDQISQ 70
 RESULT 12
 ADJ66685
 ID ADJ66685 standard; protein; 70 AA.
 XX
 AC ADJ66685;
 XX
 DT 20-MAY-2004 (first entry)
 XX
 DE Human mature eotaxin.
 XX
 KW Human; chemokine; Ckbeta-4; monocyte chemotactic protein; MCP-4; tumour;
 KW chronic infection; autoimmune disease; psoriasis; asthma; allergy;
 KW haematopoiesis; wound healing; infective diseases;
 KW histamine-mediated allergic reaction; prostaglandin-independent fever;
 KW bone marrow failure; silicosis; sarcoidosis; hyper-eosinophilic syndrome;
 KW lung inflammation; eotaxin.
 XX
 OS Homo sapiens.
 XX
 PN US2004037805-A1.
 XX
 PD 26-FEB-2004.
 XX
 PF 25-AUG-2003; 2003US-00646770.
 XX
 PR 23-AUG-1994; 94MO-US009484.
 PR 02-JUN-1995; 95US-0045835.
 PR 05-JUN-1995; 95US-00462967.
 PR 23-FEB-1996; 96US-00613822.
 PR 22-NOV-2000; 2000US-00717209.
 XX
 PA (HUMA-) HUMAN GENOME SCI INC.
 XX
 PI Li H, Adam MD, Gentz SH, Alderson R, Li Y, Parmelee D;
 PI White JR, Appelbaum ER;
 XX
 DR WPI; 2004-191006/18.
 XX
 PT New chemokine beta-4 or monocyte chemotactic protein-4 polypeptide for
 PT e.g. treating solid tumors, chronic infections, auto-immune diseases,
 PT psoriasis, asthma, or allergy.
 XX
 PS Disclosure; SEQ ID NO 17; 34pp; English.
 XX
 CC The invention relates to a polypeptide consisting of a chemokine (CK) beta
 CC -4 polypeptide (appearing as ADJ66670), or an monocyte chemotactic
 CC protein (MCP) -4 polypeptide (appearing as ADJ66672). Also included are
 CC antibodies against the protein, antagonists against the proteins, a
 CC polynucleotide encoding the proteins, a vector comprising the
 CC polynucleotide, a host cells comprising the vector, producing a
 CC polypeptide comprising expressing from the proteins from the host cell,
 CC producing cells capable of expressing a polypeptide comprising
 CC genetically engineering cells with the vector, an isolated DNA
 CC hybridisable to the polynucleotide above and encoding a polypeptide
 CC having Ckbeta-4 or MCP-4 activity, treating a patient having the need of

CC Ckbeta-4 or MCP4 comprising administering the proteins to the patient and
 CC treating a patient having the need to inhibit Ckbeta-4 or MCP-4
 CC comprising administering a Ckbeta-4 or MCP-4 antagonist to the patient.
 CC The proteins are used to treat a patient having the need of Ckbeta-4 e.g.
 CC for treating solid tumors, chronic infections, auto-immune diseases,
 CC psoriasis, asthma, or allergy, to regulate haematopoiesis, and to promote
 CC wound healing. An antagonist to the proteins is used for treating auto-
 CC immune diseases, chronic inflammatory and infective diseases, histamine-
 CC mediated allergic reactions, prostaglandin-independent fever, bone marrow
 CC failure, silicosis, sarcoidosis, hyper-eosinophilic syndrome and lung
 CC inflammation. The present sequence represents human mature eotaxin, a
 CC protein similar to human Ckbeta-4.
 XX
 SQ Sequence 70 AA;
 Query Match 84.3%; Score 330.5; DB 8; Length 70;
 Best Local Similarity 91.4%; Pred. No. 3.5e-31;
 Matches 64; Conservative 1; Mismatches 4; Indels 1; Gaps 1;
 QY 1 HPGIPSAACCFRVNT-KKISFQRLKSKYKITTSSKCPQTAIVFEIKDKMICADPKKKWVD 59
 DB 1 HPGIPSAACCFRVNTICKISFQRLKSKYKITTSSKCPQTAIVFEIKDKMICADPKKKWVD 60
 QY 60 AKKYLDQISQ 69
 DB 61 AKKYLDQISQ 70
 RESULT 13
 ADO32079
 ID ADO32079 standard; protein; 70 AA.
 XX
 AC ADO32079;
 XX
 DT 15-JUL-2004 (first entry)
 XX
 DE Botaxin mature protein.
 XX
 KW immunosuppressive; vulnery; antipsoriatic; cytostatic; antiallergic;
 KW analgesic; osteopathic; gene therapy; human; chemokine;
 KW antibody production; leukaemia; tumour; autoimmune disease; psoriasis;
 KW wound; allergic reaction; prostaglandin-independent fever;
 KW bone marrow failure; eotaxin.
 XX
 OS Unidentified.
 XX
 PN US6673344-B1.
 XX
 PD 06-JAN-2004.
 XX
 PF 22-NOV-2000; 2000US-00717209.
 XX
 PR 23-AUG-1994; 94MO-US009484.
 PR 02-JUN-1995; 95US-0045835.
 PR 05-JUN-1995; 95US-00462967.
 PR 23-FEB-1996; 96US-00613822.
 XX
 PA (HUMA-) HUMAN GENOME SCI INC.
 XX
 PI Li H, Adams M, Lima SH, Alderson R, Li Y, Parmelee D, White J;
 PI Appelbaum E;
 XX
 DR WPI; 2004-068608/07.
 XX
 PT New antibody specific to human chemokine polypeptides, useful for
 PT preparing a composition for treating leukemia, tumor, autoimmune disease,
 PT psoriasis, bone marrow failure, wound or allergic reactions.
 XX
 PS Disclosure; SEQ ID NO 17; 34pp; English.
 XX
 CC The invention describes an isolated antibody or its portion that
 CC specifically binds to human chemokine polypeptides. Also described are: a
 CC hybridoma cell line that produces the antibody; and a composition

CC comprising the antibody and a carrier. The antibody is useful for
CC preparing a composition for treating leukaemia, tumour, autoimmune
CC diseases, psoriasis, wound, allergic reactions, prostaglandin-independent
CC fever or bone marrow failure. This is the amino acid sequence of ectaxin
CC mature protein used in a comparison with human chemokine beta-4 (Chbeta-
CC 4).

XX Sequence 70 AA;

SO Query Match 84.3%; Score 330.5; DB 8; Length 70;

Best Local Similarity 91.4%; Pred. No. 3.5e-31;

Matches 64; Conservative 1; Mismatches 4; Indels 1; Gaps 1;

Qy 1 HPGIPSAACFRVTN-KKISFORLSYKIIITSSKCPQTAIVEIKEDKMICADPKKKWQD 59

Db 1 HPGIPSAACFRVTNCKISFOALSKYKIIITSSKCPQTAIVEIKEDKMICADPKKKWQD 60

Qy 60 AKTYLDQISQ 69

Db 61 AKTYLDQISQ 70

RESULT 14

ADC89677 standard; protein; 74 AA.

AC ADC89677;

DT 01-JAN-2004 (first entry)

XX Human Botaxin SEQ ID NO:8.

XX human; MCP-1; monocyte chemoattractant protein; MCP; immunosuppressive;

KW antiinflammatory; cytostatic; antimicrobial; vasotropic; gene therapy;

KW MCP-2; MCP-3; MCP-4; Eotaxin; leukocyte migration; leukocyte activation;

KW vascular disorder; cancer; inflammatory; autoimmune disease; infection.

XX Synthetic.

OS Homo sapiens

XX WO2003084993-A1.

PD 16-OCT-2003.

PF 09-APR-2003; 2003WO-EP050097.

XX 10-APR-2002; 2002US-0371442P.

PA (ISTF) ARS APPLIED RES SYSTEMS HOLDING NV.

XX Proudfoot A, Kosco-Vilbois M, Handel T;

XX WPI; 2003-804294/75.

PS Example 3; SEQ ID NO 8; 63pp; English.

XX The invention relates to novel antagonists of MCP proteins comprising

CC mutants of MCP proteins in which the following combinations of residues,

CC numbered on the sequence of human mature MCP-1, are substituted to

CC Alanine, Glycine, Serine, Threonine, Proline, Aspartic Acid, Asparagine,

CC Glutamic Acid or Glutamine; 18 and 19; 18 and/or 19, together with 58; 18

CC and/or 19, together with 66; 18 and/or 19, together with 58 and 66; and

CC 18 and/or 19, together with 24, 44, 49 and/or 75. A protein of the

CC invention has immunosuppressive, antiinflammatory, cytostatic,

CC antimicrobial, and vasotropic activity. The protein may have a use in

CC gene therapy, and in a vaccine. The MCP proteins are human MCP-1, human

CC MCP-2, human MCP-3, human MCP-4 or human Botaxin. The MCP antagonists are

CC useful in preparing a composition for treating or preventing diseases

CC related to excessive leukocyte migration and activation, e.g., vascular

CC disorders, cancer, inflammatory or autoimmune disease or infection. The

CC present sequence is used in the exemplification of the invention.

XX Sequence 74 AA;

SO Query Match 63.3%; Score 248; DB 7; Length 74;

Best Local Similarity 62.9%; Pred. No. 2e-21;

Matches 44; Conservative 10; Mismatches 16; Indels 0; Gaps 0;

Qy 4 IPSACCRVNNKISFORLSYKIIITSSKCPQTAIVEIKEDKMICADPKKKWQD 63

Db 5 VPTCCFNLANRKIPQLRLSYRRITSGKCPQRAVIFKTLAKRICADPKKKWQDSMKY 64

Qy 64 LDQISQTTKP 73

Db 65 LDQISQTTKP 74

RESULT 15

AAY69023 standard; protein; 74 AA.

AC AAY69023;

DT 30-MAY-2000 (first entry)

XX Amino acid sequence of chemokine receptor ligand eotaxin.

XX Chemokine receptor; ligand; inflammatory response; immune effector cell;

KW secondary tissue damage; central nervous system injury; eotaxin;

KW CNS inflammatory disease; neurodegenerative disorder; heart disease;

KW inflammatory eye disease; inflammatory bowel disease;

KW inflammatory joint disease; inflammatory kidney; renal disease;

KW inflammatory lung disease; inflammatory nasal disease;

KW inflammatory thyroid disease; thyroiditis; cytokine-regulated cancer.

XX Homo sapiens.

OS WO200004926-A2.

PD 03-FEB-2000.

PF 21-JUL-1999; 99WO-CA000659.

XX 22-JUL-1998; 98US-00120523.

PA (OSPR-) OSPREY PHARM LTD.

XX McDonald JR, Cogging PJ;

XX WPI; 2000-182542/16.

PS A new therapeutic agent comprising a conjugate for treating secondary

CC tissue damage and other disease conditions like Alzheimer's disease,

CC stroke, Parkinson's disease and atherosclerosis.

XX Disclosure; Page 59; 204pp; English.

XX The present sequence represents a chemokine receptor ligand. The present

CC ligand can be incorporated into the conjugates of the invention. The

CC specification describes a conjugate, comprising a targeted agent and a

CC chemokine receptor ligand. The conjugate binds to a chemokine receptor

CC resulting in internalisation of the targeted agent in cells bearing the

CC receptor. The conjugates are used for formulating a medicament or for

CC treating disorders associated with inflammatory responses resulting from

CC activation, proliferation and migration of immune effector cells. The

CC disorders or disease states comprise secondary tissue damage such as

CC central nervous system (CNS) injury, CNS inflammatory diseases,

CC neurodegenerative disorders, heart disease, inflammatory eye diseases,

CC inflammatory bowel diseases, inflammatory joint diseases, inflammatory

CC kidney or renal diseases, inflammatory lung diseases, inflammatory nasal

CC diseases, inflammatory thyroid disease such as thyroiditis, or cytokine-

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OM protein - protein search, using sw model

Run on: August 29, 2005, 20:25:42 ; Search time 40 Seconds
(without alignments)
175.596 Million cell updates/sec

Title: US-10-622-134-2

Perfect score: 392
Sequence: 1 HPGIPSAACFRVTNNKISFQ.....KKWVDAKKYLDQISQTTKP 73

Scoring table: BLOSUM62
Gapop 10.0 , Gapext 0.5

Searched: 283416 seqs, 96216763 residues

Total number of hits satisfying chosen parameters: 283416

Minimum DB seq length: 0
Maximum DB seq length: 200000000

Post-processing: Minimum Match 0%
Maximum Match 100%
Listing first 45 summaries

Database :
1: pir1:*
2: pir2:*
3: pir3:*
4: pir4:*

Pred. No. is the number of results predicted by chance to have a score greater than or equal to the score of the result being printed, and is derived by analysis of the total score distribution.

SUMMARIES

Result No.	Score	Query Match	Length	DB ID	Description
1	392	100.0	96	2	I48099
2	385	98.2	96	2	JC2478
3	244	62.2	97	2	JC4912
4	227	57.9	99	2	JC2417
5	217	55.4	99	2	JC2136
6	215	54.8	99	2	JC5295
7	214	54.6	99	2	A60299
8	208	53.1	109	2	A54678
9	206	52.6	99	1	A39296
10	206	52.6	99	2	JC2336
11	196	50.0	125	2	I46857
12	184	46.9	72	2	A55984
13	183	46.7	148	1	A30209
14	172.5	44.0	148	1	S07723
15	169.5	43.2	120	2	I48147
16	157.5	40.2	97	2	A48093
17	131.5	33.5	92	1	A31767
18	124.5	31.8	91	1	A46539
19	124	31.6	92	2	A30574
20	124	31.6	92	2	I46730
21	124	31.6	93	2	B35673
22	115.5	29.5	92	2	I52322
23	113	28.8	91	1	A28815
24	113	28.8	92	2	A32393
25	104.5	26.7	92	2	C30552
26	104.5	26.7	114	1	ETWHL
27	101	25.1	50	2	C60407
28	98.5	25.1	101	2	I48148
29	96.5	24.6	114	1	ETWHL

30	88.5	22.6	96	2	A37236	I-309 protein prec
31	88	22.4	92	2	S24236	TCA3 protein - mou
32	82	20.9	99	2	A37034	interleukin-8 prec
33	81	20.7	120	2	J80177	lymphocyte and mon
34	78.5	20.0	101	2	S42496	interleukin-8 prec
35	76.5	19.5	103	2	A53096	interleukin-8 prec
36	75.5	19.3	89	2	I53416	interleukin-8 homo
37	75.5	19.3	89	2	A53497	pre-B-cell growth-
38	75.5	19.3	93	2	I81182	cytokine - mouse
39	74.5	19.0	93	2	G01540	cytokine SDF-1-bet
40	74.5	19.0	101	2	I46871	interleukin-8 - ra
41	72.5	18.5	95	2	U00841	interleukin-8 - do
42	68.5	17.5	116	2	I49555	gene C10 protein -
43	67.5	17.2	98	2	A45492	IP-10 precursor
44	67.5	17.2	132	2	A57325	C-X-C chemokine Li
45	67.5	17.2	4540	2	T30838	cytoplasmic dynein

ALIGNMENTS

RESULT 1
148099
eotaxin precursor - guinea pig
C:Species: Cavia porcellus (guinea pig)
C:Date: 02-Jul-1996 #sequence_revision 02-Jul-1996 #text_change 09-Jul-2004
C:Accession: I48099
R:Rothenberg, M.E.; Luster, A.D.; Lilly, C.M.; Drazen, J.M.; Leder, P.
J. Exp. Med. 181, 1211-1216, 1995
A>Title: Constitutive and allergen-induced expression of eotaxin mRNA in the guinea pig
A:Reference number: I48099; MUID:95173589; PMID:7869037
A:Accession: I48099
A>Status: preliminary; translated from GB/EMBL/DBJ
A:Molecule type: mRNA
A:Residues: 1-96 <RES>
A:Cross-references: UNIPROT:P80325; EMBL:U18941; NID:9687655; PIDN:AAC52180.1; PID:96876
C:Superfamily: macrophage inflammatory protein

Query Match 100.0%; Score 392; DB 2; Length 96;
Best Local Similarity 100.0%; Pred. No. 1.1e-36;
Matches 73; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

Qy 1 HPGIPSAACFRVTNNKISFQ.....KKWVDAKKYLDQISQTTKP 60
Db 24 HPGIPSAACFRVTNNKISFQ.....KKWVDAKKYLDQISQTTKP 83
Qy 61 KKYLDQISQTTKP 73
Db 84 KKYLDQISQTTKP 96

RESULT 2
JC2478
eotaxin precursor - rat
C:Species: Rattus norvegicus (Norway rat)
C:Date: 21-Feb-1995 #sequence_revision 05-Apr-1995 #text_change 16-Jul-1999
C:Accession: JC2478
R:Jose, P.U.; Adcock, I.M.; Griffiths-Johnson, D.A.; Berkman, N.; Wells, T.N.C.; Williams
Biochem. Biophys. Res. Commun. 205, 788-794, 1994
A>Title: Eotaxin: Cloning of an eosinophil chemoattractant cytokine and increased mRNA e
A:Reference number: JC2478; MUID:95091818; PMID:7999113
A:Accession: JC2478
A:Molecule type: mRNA
A:Residues: 1-96 <ROS>
A:Cross-references: EMBL:X77603; NID:9602551; PIDN:CAA54698.1; PID:9602552
C:Comment: This protein is identified as a potent eosinophil chemoattractant.
C:Keywords: macrophage inflammatory protein
C:Keywords: glycoprotein
F:1-23/Domain: signal sequence #status predicted <SIG>
F:24-96/Product: eotaxin #status predicted <MAT>
F:93/Binding site: carbohydrate (Thr) (covalent) #status predicted
Query Match 98.2%; Score 385; DB 2; Length 96;

Best Local Similarity 98.6%; Pred. No. 6.4e-36;
Matches 72; Conservative 0; Mismatches 1; Indels 0; Gaps 0;

QY 1 HPGIPSAACFVNTNKKISFORLKSFKYKITTSSKCPQTAVFELKPKDKMTCADPKKKWVDADKKY 60
DB 24 HPGIPSAACFVNTNKKISFORLKSFKYKITTSSKCPQTAVFELKPKDKMTCADPKKKWVDAD 83

QY 61 KKYLDQISQTTKP 73
DB 84 KKYLGQISQTTKP 96

RESULT 3
JC24912
eotaxin precursor - human
C:Species: Homo sapiens (man)
C:Date: 01-Nov-1996 #sequence_revision 01-Nov-1996 #text_change 09-Jul-2004
C:Accession: J04912
R:Bartels, J.; Schlueter, C.; Richter, E.; Noso, N.; Kulke, R.; Christophers, E.; Schroe
Biochem. Biophys. Res. Commun. 225, 1045-1051, 1996
A:Title: Human dermal fibroblasts express eotaxin: Molecular cloning, mRNA expression, a
A:Reference number: J04912; MUID:96374440; PMID:8780731
A:Accession: J04912
A:Status: preliminary
A:Molecule type: mRNA
A:Residues: 1-97 <BAR>
A:Cross-references: UNIPROT:P51671; EMBL:Z75668; NID:g1531982; PIDN:CAA99997.1; PID:g153
C:Comment: This protein has eosinophil specific chemotactic activity.
C:Superfamily: macrophage inflammatory protein
C:Keywords: fibroblast
F:1-18/Domain: signal sequence #status predicted <SIG>
F:19-97/Product: eotaxin #status predicted <MAT>

Query Match 62.2%; Score 244; DB 2; Length 97;
Best Local Similarity 61.4%; Pred. No. 3.6e-20;
Matches 43; Conservative 11; Mismatches 16; Indels 0; Gaps 0;

QY 4 IPSACFVNTNKKISFORLKSFKYKITTSSKCPQTAVFELKPKDKMTCADPKKKWVDADKKY 63
DB 28 VPTTCFVLNRRKIPLOLRSEYRRTTSGKCPQKAVIFTKLAKDTCADPKKKWVDSMKY 87

QY 64 LDOISQTTKP 73
DB 88 LDOQSPTPKP 97

RESULT 4
JC2417
monocyte chemoattractant protein-2 precursor - pig
C:Species: Sus scrofa domestica (domestic pig)
C:Date: 24-Feb-1995 #sequence_revision 24-Feb-1995 #text_change 09-Jul-2004
C:Accession: J02417
R:Hosang, K.; Knoke, I.; Klaudiny, J.; Wempe, F.; Wutke, W.; Scheit, K.H.
Biochem. Biophys. Res. Commun. 205, 148-153, 1994
A:Title: Porcine luteal cells express monocyte chemoattractant protein-2 (MCP-2): Analy
A:Reference number: J02417; MUID:95091716; PMID:7999015
A:Accession: J02417
A:Molecule type: mRNA
A:Residues: 1-99 <HOS>
A:Cross-references: UNIPROT:P49873; GB:Z48480; NID:g683718; PIDN:CAA88371.1; PID:g683718
A:Experimental source: corpus luteum
C:Superfamily: macrophage inflammatory protein
F:1-23/Domain: signal sequence #status predicted <SIG>
F:24-99/Product: monocyte chemoattractant protein-2 #status predicted <MAT>

Query Match 57.9%; Score 227; DB 2; Length 99;
Best Local Similarity 57.1%; Pred. No. 2.9e-18;
Matches 40; Conservative 14; Mismatches 16; Indels 0; Gaps 0;

QY 4 IPSACFVNTNKKISFORLKSFKYKITTSSKCPQTAVFELKPKDKMTCADPKKKWVDADKKY 63
DB 30 IPTCCFGLVNGKIPFKLSEYTRITNSQCPQEAIVFTKADKEVCADPQCKWQNSWKL 89

QY 64 LDOISQTTKP 73
DB 90 LDOQSPTPKP 99

RESULT 5
JC2136
monocyte chemoattractant protein-1 precursor - pig
C:Species: Sus scrofa domestica (domestic pig)
C:Date: 30-Sep-1993 #sequence_revision 20-Aug-1994 #text_change 09-Jul-2004
C:Accession: J02136; S57498
R:Hosang, K.; Knoke, I.; Klaudiny, J.; Wempe, F.; Wutke, W.; Scheit, K.H.
Biochem. Biophys. Res. Commun. 199, 962-968, 1994
A:Title: Porcine luteal cells express monocyte chemoattractant protein-1 (MCP-1): Analy
A:Reference number: J02136; MUID:94183284; PMID:7510962
A:Accession: J02136
A:Molecule type: mRNA
A:Residues: 1-99 <HOS>
A:Cross-references: UNIPROT:P42831; GB:Z48479; NID:g663716; PIDN:CAA88370.1; PID:g663717
R:Zach, O.
Submitted to the EMBL Data Library, July 1994
A:Reference number: S57497
A:Accession: S57498
A:Status: preliminary
A:Molecule type: mRNA
A:Residues: 1-99 <ZAC>
A:Cross-references: EMBL:X79416; NID:g872312; PIDN:CAAS5945.1; PID:g872313
C:Superfamily: macrophage inflammatory protein
C:Keywords: glycoprotein
F:1-23/Domain: signal sequence #status predicted <SIG>
F:24-99/Product: monocyte chemoattractant protein-1 #status predicted <MAT>
F:94/Binding site: carbohydrate (asn) (covalent) #status predicted

Query Match 55.4%; Score 217; DB 2; Length 99;
Best Local Similarity 55.1%; Pred. No. 3.8e-17;
Matches 38; Conservative 15; Mismatches 16; Indels 0; Gaps 0;

QY 5 PSACFVNTNKKISFORLKSFKYKITTSSKCPQTAVFELKPKDKMTCADPKKKWVDADKKYL 64
DB 31 PVTCVYLTSTKSKSMORLMSYRVRTTSKCPQEAIVFTYIAGKEICAEPKQKWVDSISHL 90

QY 65 DQISQTTKP 73
DB 91 DKNGQTPKP 99

RESULT 6
JC5295
monocyte chemotactic protein-2 precursor - human
C:Species: Homo sapiens (man)
C:Date: 02-May-1997 #sequence_revision 18-Jul-1997 #text_change 09-Jul-2004
C:Accession: J05295
R:Van Collille, E.; Froyen, G.; Nomiyama, H.; Miura, R.; Filten, P.; Van Aelst, I.; Van Dan
Biochem. Biophys. Res. Commun. 231, 726-730, 1997
A:Title: Human monocyte chemotactic protein-2: cDNA cloning and regulated expression of n
A:Reference number: J05295; MUID:97224420; PMID:9070881
A:Accession: J05295
A:Molecule type: mRNA
A:Residues: 1-99 <VAN>
A:Cross-references: UNIPROT:P80075; GB:Y10802; NID:g1924937; PIDN:CAA71760.1; PID:g1924937
A:Experimental source: bone marrow
C:Comment: This protein belongs to the beta-chemokine family which is one of the major H
tis and in tumor biology, and contribute to the trafficking and recruitment of the respo
C:Gene: MCP-2
C:Superfamily: macrophage inflammatory protein
F:1-23/Domain: signal sequence #status predicted <SIG>
F:24-99/Product: monocyte chemotactic protein-2 #status predicted <MAT>

Query Match 54.8%; Score 215; DB 2; Length 99;
Best Local Similarity 52.9%; Pred. No. 6.3e-17;
Matches 37; Conservative 15; Mismatches 18; Indels 0; Gaps 0;

OY 4 IPSACCFVTVTKKISFQRLSKSYKITSSCKCPQTALVFPIKEDKMCAAPKKWWDADAKY 63
| | | | | | | | | | | | | | | | : | | | | | | | | | | | | | | | |
DB 30 IPIICCFVINRKRIIQLBESYTRITNIGCPREAVIFRTGKGVEYCADPKERWRDMSKH 89
| | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
OY 64 LDQISQTTKP 73
| | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
DB 90 LDQIQNLKP 99
| | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |

RESULT 7
A60299 monocytic chemottractant protein 1 precursor - human
N:Alternate names: GDCF-1; glioma-derived monocytic chemotactic factor 1; MCAF; MCP-1, mcf-1
M:Contains: glioma-derived chemotactic factor 2 (GDGF-2)
C:Species: Homo sapiens (man)
C:Dates: 20-Feb-1993 #sequence revision 20-Feb-1993 #text change 09-Jul-2004
A:Cc accession: A55474; A33476; S03339; I51841; A60299; A52300; A33966; A34561; I57488; JCI
R:Shyy, Y.J.; Li, Y.S.; Kolatukudy, P.E.
Biochem. Biophys. Res. Commun. 169, 346-351, 1990
A>Title: Structure of human monocytic chemotactic protein gene and its regulation by TPA
A:Reference number: A55474; MUID:90290466; PMID:2357211
A:Accession: A55474
A:Molecule type: DNA
A:Residues: 1-99 <SHY>
A:Cross-references: UNIPROT:P13500; GB:M37719; NID:g187447; PIDN:AAA18102.1; PID:g487122
R:Rollins, B.J.; Stier, P.; Ernst, T.; Wong, G.G.
Mol. Cell. Biol. 9, 4687-4695, 1989
A>Title: The human homolog of the JB gene encodes a monocyte secretory protein.
A:Reference number: A33476; MUID:90097880; PMID:2513477
A:Accession: A33476
A:Molecule type: mRNA
A:Residues: 1-99 <ROL>
A:Cross-references: GB:M30816; GB:M31625; GB:M31626; NID:g188701; PIDN:AAA6330.1; PID:g5307163
R:Yoshimura, T.; Yunoki, N.; Moore, S.K.; Appella, E.; Lerman, M.I.; Leonard, E.J.
FEBS Lett. 244, 487-493, 1989
A>Title: Human monocyte chemottractant protein-1 (MCP-1). Full-length cDNA cloning, expression,
and characterization of recombinant protein.
A:Reference number: S03339; MUID:89153605; PMID:2465924
A:Accession: S03339
A>Status: not compared with conceptual translation
A:Molecule type: mRNA
A:Residues: 1-99 <YOS>
A:Cross-references: GB:X14768; NID:g34513; PIDN:CAA32876.1; PID:g34514
A:Experimental source: glioma cell line U-105MG
R:Yoshimura, T.; Leonard, E.J.
Adv. Exp. Med. Biol. 305, 47-56, 1991
A>Title: Human monocyte chemottractant protein-1 (MCP-1).
A:Reference number: I51841; MUID:92095166; PMID:1661560
A:Accession: I51841
A>Status: preliminary; translated from GB/EMBL/DDBT
A:Molecule type: mRNA
A:Residues: 1-99 <YOZ>
A:Cross-references: GB:S71513; NID:g240867; PIDN:AAB20651.1; PID:g240868
R:Botlaizki, B.; Colotta, F.; Sica, A.; Nobili, N.; Mantovani, A.
Int. J. Cancer 45, 795-797, 1990
A>Title: A chemottractant expressed in human sarcoma cells (tumor-derived chemotactic f
-1/MCAF).
A:Reference number: A60299; MUID:90216082; PMID:2182547
A:Accession: A60299
A>Status: not compared with conceptual translation
A:Molecule type: mRNA
A:Residues: 1-99 <BOT>
R:Futani, Y.; Nomura, H.; Nozaki, M.; Oyama, Y.; Fukui, T.; Yamada, M.; Larsen, C.G.; Griffin, P.R.; Shabanowitz,
Biochem. Biophys. Res. Commun. 159, 249-255, 1989
A>Title: Cloning and sequencing of the cDNA for human monocyte chemotactic and activating
A:Reference number: A52300; MUID:89165862; PMID:2923622
A:Accession: A52300
A>Status: not compared with conceptual translation
A:Molecule type: mRNA
A:Residues: 1-99 <PUP>
A:Cross-references: GB:M4545; NID:g187434; PIDN:AAA18164.1; PID:g307163
R:Griffin, P.R.; Yoshimura, T.; Leonard, E.J.; Tanaka, S.; Griffin, P.R.; Shabanowitz,

Proc. Natl. Acad. Sci. U.S.A. 86, 1850-1854, 1989

AtTitle: Complete amino acid sequence of a human monocyte chemoattractant, a putative member of the chemokine family

A:Reference number: A32396, MUID:69184525, PMID:2648385

A:Accession: A32396

A:Molecule type: protein

A:Residues: 'X', 25-99 <RDB>

R:Descr: B.; Conting. R.; Lenaerts, J.P.; Billiau, A.; Van Damme, J.

Biochem. Biophys. Res. Commun. 167, 904-909, 1990

AtTitle: Identification of the monocyte chemoattractant protein from human osteosarcoma cell line

A:Reference number: A34561, MUID:90211336, PMID:2322286

A:Accession: A34561

A:Molecule type: protein

A:Residues: 29-33, 'XX', 36-52, 82-92 <DEC>

R:Li: Y.S.; Shyy, Y.J.; Wright, J.G.; Valente, A.V.; Cornhill, J.F.; Kolattukudy, P.E.

Mol. Cell. Biochem. 126, 61-68, 1993

AtTitle: The expression of monocyte chemoattractant protein (MCP-1) in human vascular endothelial cells

A:Reference number: I57488, MUID:94150478, PMID:8107690

A:Accession: I57488

A:Status: translated from GB/EMBL/DDBT

A:Molecule type: mRNA

A:Residues: 1-99 <LIT>

A:Cross-references: GB:569738; NID:9545464; PIDN:AAB2926.1; PID:9545465

R:Ye, Q.N.; Su, G.F.; Yuan, Y.; Huang, C.F.

Chinese J. Microbiol. Immunol. 14, 29-32, 1994

AtTitle: The PCR, cloning and sequencing of human monocyte chemoattractant protein-1 (MCP-1) cDNA

A:Reference number: JCI1096

A:Accession: JCI1096

A:Molecule type: mRNA

A:Residues: 24-28, 'Q', 30-99 <YEQ>

C:Genetics:

A:Gene: GDB:SCY1A2

A:Cross-references: GDB:125279; OMIM:158105

A:Map position: 17q11.2-17q12

C:Superfamily: macrophage inflammatory protein

C:Keywords: cytokine; glycoprotein; inflammation; pyroglutamic acid

F:1-23/Domain: signal sequence #status predicted <SIG>

F:24-99/Product: monocyte chemoattractant protein 1 #status experimental <MAT>

F:29-99/Product: monocyte chemoattractant protein 1, short form #status experimental <MA>

F:24/Modified site: pyrrolidone carboxylic acid (Gln) (in mature form) #status experimental

F:37/Binding site: carbohydrate (Asn) (covalent) #status predicted

Query Match 54.6%; Score 214; DB 2; Length 99;

Best Local Similarity 57.4%; Pred. No. 8.1e-17;

Matches 39; Conservative 12; Mismatches 17; Indels 0; Gaps 0;

Cy 5 PSACCFVPTKKKISFQRLKSYKIIITSSKCPQTAIVFPIKDKMIGADPKKKWQDAKKYL 64

Db 31 PVTCTVFNTRKLSVQRLASVYRITSSKCPKEAIVFTYAKELCADPKKKWQDSMDHL 90

Cy 65 DOIISQTPK 72

Db 91 DKQGTQPK 98

RESULT 8

A54678

N:Alternate names: monocyte chemoattractant protein MCP-3

C:Species: Homo sapiens (man)

C:Date: 28-Oct-1994 #sequence_revision 28-Oct-1994 #text_change 16-Jul-1999

C:Accession: A54678; JCI1478; S32222

R:Descr: B.; Conting. R.; Nys, G.; Froyen, G.; Van Roy, N.; Speleman, F.; Laureys, G.

Genomics 21, 403-408, 1994

AtTitle: The human MCP-3 gene (SCY1A7): cloning, sequence analysis, and assignment to the chromosome 16p11.2

A:Reference number: A54678; MUID:94375065; PMID:7916328

A:Accession: A54678

A:Molecule type: DNA

A:Residues: 1-109 <OPD>

A:Cross-references: GB:X72309

R:Opdenakker, G.; Froyen, G.; Fiten, P.; Proost, P.; Van Damme, J.

Biochem. Biophys. Res. Commun. 191, 535-542, 1993

AtTitle: Human monocyte chemoattractant protein-3 (MCP-3): Molecular cloning of the cDNA and characterization of the protein

A:Reference number: JCI1478; MUID:93213290; PMID:8461011

A:Accession: JCI478
A:Molecule type: mRNA
A:Residues: 1-109 <OP2>
A:Cross-references: GB:X72308; GB:S57464; NID:G93928270; PIDN:CAA51055.1; PID:G9313708
R:Milly, A.; Chalou, P.; Guillemin, R.C.; Kaghad, M.; Liauzun, P.; Magazian, M.; Miloux, submitted to the EMBL Data Library, March 1993
A:Description: Molecular cloning of MCP-3: a human monocyte-derived monocyte chemoattractant
A:Reference number: S32222
A:Accession: S32222
A:Molecule type: mRNA
A:Residues: 1-109 <MIN>
A:Cross-references: EMBL:X71087; NID:G288396; PIDN:CAA50405.1; PID:G288397
C:Comment: This protein induces proteinase secretion and chemotaxis by macrophages and T cells
C:Genetics:
A:Gene: GDB:SCYA7; SCYA6; MCP-3
A:Cross-references: GDB:138473; OMIM:158106
A:Map position: 17q11-17q12
A:Introns: 36/1; 75/2
C:Superfamily: macrophage inflammatory protein
C:Keywords: cytokine; glycoprotein; inflammation
F:1-33/Domain: signal sequence #status predicted <SIG>
F:34-109/Product: monocyte chemotactic protein 3 #status predicted <MAT>
F:39/Binding site: carbohydrate (Asn) (covalent) #status predicted

Query Match 53.1%; Score 208; DB 2; Length 109;
Best Local Similarity 56.7%; Pred. No. 4,2e-16;
Matches 38; Conservative 12; Mismatches 17; Indels 0; Gaps 0;

QY 6 SACCPRVTNKKISFORLSKYKIIITSSKCPQTAIVFEIKDPKMICADPKKKWVDAAKTYLD 65
DB 42 TTCCTFRFTNKKIPKORLSYKRTTSSHCPRKAVIFKTYLDKEICADPKQKWVDPMKHL 101

QY 66 QISQTTK 72
DB 102 KKTQTPK 108

RESULT 9
A39296
monocyte chemoattractant protein 1 precursor - bovine
N:Alternate names: monocyte chemotactic factor 1; seminal plasma protein P6
C:Species: Bos primigenius taurus (cattle)
C:Date: 10-Sep-1999 #sequence_revision 10-Sep-1999 #text_change 09-Jul-2004
C:Accession: A39296; #sequence_revision 10-Sep-1999 #text_change 09-Jul-2004
R:Mempé, F.; Henschen, A.; Scheit, K.H.
DNA Cell Biol. 10; 671-679, 1991
A:Title: Gene expression and cDNA cloning identified a major basic protein constituent c
A:Reference number: A39296; MUID:92096117; PMID:1721821
A:Accession: A39296
A:Molecule type: mRNA
A:Residues: 1-99 <MEM>
A:Cross-references: UNIPROT:P28291; GB:M84602; GB:M85264; NID:G163394; PIDN:AAA30651.1;
A:Accession: B39286
A:Molecule type: protein
A:Residues: 50-681 'X', 70-74, 'X', 76 <ME2>
A:Experimental source: seminal vesicle
C:Superfamily: macrophage inflammatory protein
C:Keywords: glycoprotein
F:1-23/Domain: signal sequence #status predicted <SIG>
F:24-99/Product: monocyte chemoattractant protein 1 #status predicted <MAT>
F:94/Binding site: carbohydrate (Asn) (covalent) #status predicted

Query Match 52.6%; Score 206; DB 1; Length 99;
Best Local Similarity 53.7%; Pred. No. 6,3e-16;
Matches 36; Conservative 15; Mismatches 16; Indels 0; Gaps 0;

QY 7 ACCPRVTNKKISFORLSKYKIIITSSKCPQTAIVFEIKDPKMICADPKKKWVDAAKTYLD 66
DB 33 ACCYFNSKISIMQGLNMYRRTSSKCPKEAVIFFTILGKELCADPKQKWVDSTINYLK 92
QY 67 ISQTTK 73
DB 93 KKTQTPK 99

RESULT 10
JC2336
monocyte chemoattractant protein-1 - bovine
C:Species: Bos primigenius indicus (zebu cattle)
C:Date: 20-Feb-1995 #sequence_revision 20-Feb-1995 #text_change 03-May-1996
C:Accession: JC2336
R:Mempé, F.; Kuhlmann, J.K.; Scheit, K.H.
Biochem. Biophys. Res. Commun. 202; 1272-1279, 1994
A:Title: Characterization of the bovine monocyte chemoattractant protein-1 gene.
A:Reference number: JC2336; MUID:94338337; PMID:8060303
A:Accession: JC2336
A:Molecule type: protein
A:Residues: 1-99 <MEM>
C:Genetics:
A:Gene: MCP-1
A:Introns: 26/1; 65/2
C:Superfamily: macrophage inflammatory protein

Query Match 52.6%; Score 206; DB 2; Length 99;
Best Local Similarity 53.7%; Pred. No. 6,3e-16;
Matches 36; Conservative 15; Mismatches 16; Indels 0; Gaps 0;

QY 7 ACCPRVTNKKISFORLSKYKIIITSSKCPQTAIVFEIKDPKMICADPKKKWVDAAKTYLD 66
DB 33 ACCYFNSKISIMQGLNMYRRTSSKCPKEAVIFKTYLDKEICADPKQKWVDSTINYLK 92

QY 67 ISQTTK 73
DB 93 KKTQTPK 99

RESULT 11
I46857
monocyte chemoattractant protein-1 - rabbit
C:Species: Oryctolagus cuniculus (domestic rabbit)
C:Date: 14-Feb-1997 #sequence_revision 14-Feb-1997 #text_change 09-Jul-2004
C:Accession: I46857
R:Yoshimura, T.; Yuhki, N.
J. Immunol. 146; 3483-3488, 1991
A:Title: Neutrophil attractant/activation protein-1 and monocyte chemoattractant protein
A:Reference number: I46857; MUID:91225489; PMID:2026877
A:Accession: I46857
A:Status: preliminary; translated from GB/EMBL/DBJ
A:Molecule type: mRNA
A:Residues: 1-125 <YOS>
A:Cross-references: UNIPROT:P28292; GB:M57440; NID:G165469; PIDN:AAA31386.1; PID:G165470
C:Superfamily: macrophage inflammatory protein

Query Match 50.0%; Score 196; DB 2; Length 125;
Best Local Similarity 55.9%; Pred. No. 1e-14;
Matches 38; Conservative 9; Mismatches 21; Indels 0; Gaps 0;

QY 5 PSACPRVTNKKISFORLSKYKIIITSSKCPQTAIVFEIKDPKMICADPKKKWVDAAKTYL 64
DB 31 PVTCCYFTNKTISVKKLMSYRRTSSKCPKEAVIFFTILGKELCADPKQKWVDATANL 90

QY 65 DQISQTTK 72
DB 91 DKKTQTPK 98

RESULT 12
A55984
monocyte chemotactic protein bo-MCP-1b - bovine (fragments)
C:Species: Bos primigenius taurus (cattle)
C:Date: 19-Jan-1996 #sequence_revision 19-Jan-1996 #text_change 09-May-1997
C:Accession: A55984
R:Proost, P.; Wuyts, A.; Lenaerts, J.P.; Van Damme, J.
Biochemistry 33; 13406-13412, 1994
A:Title: Purification, sequence analysis, and biological characterization of a second bo
A:Reference number: A55984; MUID:95034774; PMID:7947749

A:Accession: A55984
A:Status: preliminary
A:Molecule type: protein
A:Residues: 1-72 <PRO>
C:Superfamily: macrophage inflammatory protein

Query Match
Best Local Similarity 46.9%; Score 184; DB 2; Length 72;
Matches 35; Conservative 14; Mismatches 18; Indels 2; Gaps 1;

QY 5 PSACFRVTNKKISFQRLSKYKIIITSSKCPQTAIVFEIKPDKMTCADPKKKWQDAKKYL 64
DB 6 PVTCCCTLTSLKSKIMQRLMSYRVRVTSKCPKEAVVFYTKLKEVCADPKKEWQYTIKYL 63
QY 65 DOIISQTKP 73
DB 64 DKKNQPKP 72

RESULT 13
A:Accession: A30209
A:Title: Inducible JB glycoprotein precursor - mouse
C:Species: Mus musculus (house mouse)
C:Date: 10-Sep-1999 #sequence revision 10-Sep-1999 #text_change 09-Jul-2004
C:Accession: A30209; A44771; A30861
R:Rollins, B.J.; Morrison, E.D.; Stiles, C.D.
Proc. Natl. Acad. Sci. U.S.A. 85, 3738-3742, 1988
A:Title: Cloning and expression of JB, a gene inducible by platelet-derived growth factor
A:Reference number: A30209; MUID:88234501; PMID:3287374
A:Accession: A30209
A:Molecule type: DNA
A:Residues: 1-148 <ROL>
A:Cross-references: UNIPROT:P10148; GB:M19681; NID:g193486; PIDN:AAA37684.1; PID:g387168
R:Kawahara, R.S.; Deuel, T.F.
J. Biol. Chem. 264, 679-682, 1989
A:Title: Platelet-derived growth factor-inducible gene JB is a member of a family of sma
A:Reference number: A44771; MUID:89093129; PMID:2910858
A:Accession: A44771
A:Molecule type: mRNA
A:Residues: 1-148 <KA2>
A:Cross-references: GB:J04467; NID:g193488; PIDN:AAA37685.1; PID:g387169
C:Genetics:
A:Gene: JB
A:Introns: 26/1; 65/2
A:Superfamily: macrophage inflammatory protein
C:Keywords: cytokine; glycoprotein
F:126/Binding site: carbohydrate (Aan) (covalent) #status predicted

Query Match
Best Local Similarity 46.7%; Score 183; DB 1; Length 148;
Matches 34; Conservative 12; Mismatches 23; Indels 0; Gaps 0;

QY 5 PSACFRVTNKKISFQRLSKYKIIITSSKCPQTAIVFEIKPDKMTCADPKKKWQDAKKYL 64
DB 31 PVTCCCTLTSLKSKIMQRLMSYRVRVTSKCPKEAVVFYTKLKEVCADPKKEWQYTIKYL 90
QY 65 DOIISQTKP 73
DB 91 DKKNQPKP 99

RESULT 14
S07723
Immediate-early serum-responsive protein JB precursor - rat
N:Alternate names: monocyte chemoattractant protein-1
C:Species: Rattus norvegicus (Norway rat)
C:Date: 10-Sep-1999 #sequence revision 10-Sep-1999 #text_change 09-Jul-2004
C:Accession: S07723; JN0128
R:Timmer, H.T.M.; Pronk, G.J.; Bos, J.L.; van der Eb, A.J.
Nucleic Acids Res. 18, 23-34, 1990
A:Title: Analysis of the rat JB gene promoter identifies an AP-1 binding site essential
A:Reference number: S07723; MUID:90174947; PMID:2106664
A:Accession: S07723

A:Molecule type: DNA
A:Residues: 1-148 <TIM>
A:Cross-references: UNIPROT:P14844; EMBL:X17053; NID:g55530; PIDN:CAA34901.1; PID:g55531
R:Yoshimura, T.; Takeya, M.; Takahashi, K.
Biochem. Biophys. Res. Commun. 174, 504-509, 1991
A:Title: Molecular cloning of rat monocyte chemoattractant protein-1 (MCP-1) and its exp
A:Reference number: JN0128; MUID:91128376; PMID:1704226
A:Accession: JN0128
A:Molecule type: mRNA
A:Residues: 1-148 <YOS>
A:Cross-references: GB:M57441; NID:g205333; PIDN:AAA63496.1; PID:g205334
A:Experimental source: spleen cells
A>Note: the authors translated the codon GAA for residue 62 as Lys and GCT for residue 6
C:Genetics:
A:Introns: 26/1; 65/2
A:Superfamily: macrophage inflammatory protein
F:1-23/Dominant: signal sequence #status predicted <SIG>
F:24-148/Product: immediate-early serum-responsive protein JB #status predicted <MAT>

Query Match
Best Local Similarity 44.0%; Score 172.5; DB 1; Length 148;
Matches 35; Conservative 10; Mismatches 22; Indels 3; Gaps 1;

QY 5 PSACFRVTNKKISFQRLSKYKIIITSSKCPQTAIVFEIKPDKMTCADPKKKWQDAKKYL 64
DB 31 PVTCCCTLTSLKSKIMQRLMSYRVRVTSKCPKEAVVFYTKLKEVCADPKKEWQYTIKYL 90
QY 65 DOIISQTKP 71
DB 91 DKKNQPKP 100

RESULT 15
I48147
monocyte chemoattractant protein-1 - guinea pig
C:Species: Cavia porcellus (guinea pig)
C:Date: 02-Jul-1996 #sequence revision 02-Jul-1996 #text_change 09-Jul-2004
C:Accession: I48147
R:Yoshimura, T.
J. Immunol. 150, 5025-5032, 1993
A:Title: cDNA cloning of guinea pig monocyte chemoattractant protein-1 and expression of
A:Reference number: I48147; MUID:93267104; PMID:8496603
A:Accession: I48147
A:Status: preliminary; translated from GB/EMBL/DBJ
A:Molecule type: mRNA
A:Residues: 1-120 <RES>
A:Cross-references: UNIPROT:Q08782; GB:I04985; NID:g349820; PIDN:AAA37047.1; PID:g349821
C:Genetics:
A:Gene: MCP-1
C:Superfamily: macrophage inflammatory protein

Query Match
Best Local Similarity 43.2%; Score 169.5; DB 2; Length 120;
Matches 34; Conservative 13; Mismatches 24; Indels 9; Gaps 1;

QY 3 GIPNACFRVTNKKISFQRLSKYKIIITSSKCPQTAIVFEIKPDKMTCADPKKKWQDAKK 62
DB 27 GVNTPTCCTYFNKQIPLKRVKGVGRITSSRCPEAVVFYTKLKEVCADPKKEWQYTIKYL 86
QY 63 YLDO-----ISQTKP 73
DB 87 KLDOPTQOKONSTAPQTSKP 106

Search completed: August 29, 2005, 20:36:14
Job time : 41 sec

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OM protein - protein search, using sw model

Run on: August 29, 2005, 20:17:27 ; Search time 173 Seconds

(without alignments)
216.080 Million cell updates/sec

Title: US-10-622-134-2

Perfect score: 392
Sequence: 1 HPGLPSACCFRVNKKISFO.....KKWQDAKKYLDQISQTTKP 73

Scoring table: BLOSUM62
Gapop 10.0 , Gapext 0.5

Searched: 1612378 seqs, 512079187 residues

Total number of hits satisfying chosen parameters: 1612378

Minimum DB seq length: 0
Maximum DB seq length: 200000000

Post-processing: Minimum Match 0%
Maximum Match 100%
Listing first 45 summaries

Database :
1: uniprot_sprot:*
2: uniprot_trembl:*

Pred. No. is the number of results predicted by chance to have a score greater than or equal to the score of the result being printed, and is derived by analysis of the total score distribution.

SUMMARIES

Result No.	Score	Query Match	Length	ID	Description
1	392	100.0	96	1 EOTA_CAVPO	P80325 cavia porce
2	254	64.8	100	1 EOTA_HORSE	O9ctq4 equus caball
3	247	63.0	97	1 EOTA_HUMAN	P51671 homo sapien
4	236	60.2	97	1 EOTA_MACMU	Q8h1t7 macaca mula
5	236	60.2	97	2 O8HXZ5	Q8h1t5 macaca mula
6	236	60.2	97	2 O9TTS6	O9tts6 bos taurus
7	234.5	59.8	97	1 EOTA_RAT	P97545 rattus norv
8	229.5	58.5	97	1 EOTA_MOUSE	P48298 mus musculu
9	229	58.4	99	2 O8MKC8	Q8mkc8 equus caball
10	227	57.9	99	1 SY08_PIG	P49873 sus scrofa
11	224	57.1	101	1 SY02_CANFA	P52203 canis faml
12	220	56.1	99	2 O8HYQ0	O8hyq0 macaca mula
13	219	55.9	99	1 SY08_HUMAN	P80075 homo sapien
14	218	55.6	99	1 SY02_MACRA	P61274 macaca fasc
15	218	55.6	99	1 SY02_MACMU	P61275 macaca mula
16	218	55.6	99	2 O6XVNS	O6xvns macaca neme
17	217	55.4	99	1 SY02_HORSE	O9ctq3 equus cabal
18	217	55.4	99	1 SY02_PIG	P42831 sus scrofa
19	217	55.4	99	2 O865F4	O865f4 macaca neme
20	215	54.8	99	2 O86AY9	O86ay9 canis faml
21	214	53.6	99	1 SY02_HUMAN	P13500 homo sapien
22	213	53.3	99	1 SY08_BOVIN	O09141 bos taurus
23	210.5	53.7	98	1 SY13_HUMAN	O99616 homo sapien
24	209	53.3	109	2 O865F3	O865f3 macaca neme
25	208.5	53.2	98	1 SY13_CANFA	O6y988 canis faml
26	208	53.1	99	1 SY07_HUMAN	P80098 homo sapien
27	208	53.1	109	2 Q7Z7Q8	Q7z7q8 bos taurus
28	206	52.6	99	1 MCPA_BOVIN	P28291 bos taurus
29	204	52.0	74	1 MCPB_BOVIN	P80343 bos taurus
30	196	50.0	125	1 SY02_RABIT	P28292 coryctolagus
31	194	49.5	104	1 SY12_MOUSE	O62401 mus musculu

32	191.5	48.9	97	2 Q9Z318	Q9z318 cavia porce
33	187.5	47.8	150	2 O8CGM5	O8cgm5 sigmodon hi
34	183	46.7	148	1 SY02_MOUSE	P10148 mus musculu
35	172.5	44.0	148	1 SY02_RAT	P14844 rattus norv
36	172	43.9	62	2 O9S650	O9s650 homo sapien
37	172	43.9	81	2 Q9TQ2	Q9tq2 equus caball
38	169.5	43.2	120	1 SY02_CAVPO	O08782 cavia porce
39	163.5	41.7	97	1 SY07_RAT	O9qxy8 rattus norv
40	162.5	41.5	97	1 SY07_MOUSE	O03366 mus musculu
41	162	41.5	97	1 SY08_MOUSE	O9t121 mus musculu
42	154.5	39.4	75	2 Q9TQ1	O9ctq1 equus caball
43	154	39.3	106	2 Q9Z292	Q9z292 cricetus
44	144.5	36.9	92	1 RBG1_BOVIN	P82943 bos taurus
45	141	36.0	119	2 Q8K477	Q8k477 rattus norv

ALIGNMENTS

```

RESULT 1
BOTA_CAVPO STANDARD; PRT; 96 AA.
ID BOTA_CAVPO
AC P80325;
DT 01-JUN-1994 (Rel. 29, Created)
DT 01-OCT-1996 (Rel. 34, Last sequence update)
DT 25-OCT-2004 (Rel. 45, Last annotation update)
DE Bortaxin precursor (small inducible cytokine A11) (CCU11) (Eosinophil
DE chemotactic protein).
GN Name=CCU11; Synonyms=SCYA11;
OS Cavia porcellus (Guinea pig).
OC Eukaryota; Metazoa; Chordata;
OC Mammalia; Euteria; Rodentia; Hystriocognathi; Cavidae; Cavia.
OX NCBI_TaxId=10141;
RN [1]
RP SEQUENCE FROM N.A.
RC TISSUE=Lung;
RX MEDLINE=95173589; PubMed=7869037;
RA Rothenberg M.E., Luster A.D., Lilly C.M., Drazen J.M., Leder P.;
RT "Constitutive and allergen-induced expression of eotaxin mRNA in the
RT guinea pig lung.";
RL J. Exp. Med. 181:1211-1216(1995).
RN [2]
RP SEQUENCE FROM N.A.
RC STRAIN=Hartley; TISSUE=Lung;
RX MEDLINE=94157409; PubMed=7509365;
RA Jose P.J., Griffiths-Johnson D.A., Collins P.D., Walsh D.T.,
RA Mogbel R., Totty N.F., Truong O., Heuan J.J., Williams T.J.;
RT "Eotaxin: a potent eosinophil chemoattractant cytokine and
RT guinea pig model of allergic airways inflammation.";
RL J. Exp. Med. 179:881-887(1994).
CC -!- FUNCTION: In response to the presence of allergens, this protein
CC directly promotes the accumulation of eosinophils, a prominent
CC feature of allergic inflammatory reactions.
CC -!- SUBCELLULAR LOCATION: Secreted.
CC -!- TISSUE SPECIFICITY: Lung.
CC -!- SIMILARITY: Belongs to the interleukin beta (chemokine CC) family.
CC
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```

DR EMBL; U18941; AAC52180.1; -
DR EMBL; X77603; CAAS4698.1; -
DR PIR; I48099; I48099.
DR HSSP; P51671; IBOT.
DR InterPro; IPR000827; CC_chemkine_sml.
DR InterPro; IPR001811; Chemokine_IL8.
DR Pfam; PF00048; IL8; 1.
DR SMART; SM00199; SCY; 1.
DR PROSITE; PS00472; SMALL_CYTOKINES_CC; 1.
DR Chemotaxis; Cytokine; Direct protein sequencing; Glycoprotein;
KW Inflammatory response; Signal.
FT SIGNAL 1 23
FT CHAIN 24 96 Botaxin.
FT DISULFID 31 56 By similarity.
FT DISULFID 32 72 By similarity.
FT CARBOHYD 93 93 O-linked (potential).
FT CONFLICT 88 88 D->G (in Ref. 2).
SQ SEQUENCE 96 AA; 10753 MW; 62C856645BC6AC99 CRC64;

Query Match 100.0%; Score 392; DB 1; Length 96;
Best Local Similarity 100.0%; Pred. No. 6,5e-37;
Matches 73; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 1 HPGIPACCFRVTKKISFORLKSFKYIIITSSKCPQTAVIVEIKPKMTCADPKKKWQDA 60
DB 24 HPGIPACCFRVTKKISFORLKSFKYIIITSSKCPQTAVIVEIKPKMTCADPKKKWQDA 83
QY 61 KKYLDQISQTTK 73
DB 84 KKYLDQISQTTK 96

RESULT 2
ID BOTR_HORSE STANDARD; PRT; 100 AA.
AC Q9TQ04;
DT 05-JUL-2004 (Rel. 44, Created)
DT 05-JUL-2004 (Rel. 44, Last sequence update)
DT 25-OCT-2004 (Rel. 45, Last annotation update)
DE Botaxin precursor (small inducible cytokine A11) (CC111).
GN Name=CC111; Synonyms=SCY111;
OS Equus caballus (Horse).
OC Eukaryota; Metazoa; Chordata; Craniata; Vertebrata; Euteleostomi;
OC Mammalia; Eutheria; Perissodactyla; Equidae; Equus.
OX NCBI_TaxID=9796;
RN [1]
RP SEQUENCE FROM N.A.
RX MEDLINE=21061912; PubMed=11044560; DOI=10.1016/S0165-2427(00)00222-1;
RA Benarafa C., Cunningham F.M., Hamblin A.S., Horohov D.W.,
RA Collins M.E.;
RT "Cloning of equine chemokines eotaxin, monocyte chemoattractant
protein (MCP)-1, MCP-2 and MCP-4, mRNA expression in tissues and
RT induction by IL-4 in dermal fibroblasts.";
RL Vet. Immunol. Immunopathol. 76:283-298(2000).
CC -!- FUNCTION! In response to the presence of allergens, this protein
CC directly promotes the accumulation of eosinophils, a prominent
CC feature of allergic inflammatory reactions. Binds to CCR3 (By
CC similarity).
CC -!- SUBCELLULAR LOCATION: Secreted.
CC -!- SIMILARITY: Belongs to the interleukin beta (chemokine CC) family.
CC -----
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CC -----
DR EMBL; AJ251188; CAB61624.1; -
DR HSSP; P51671; IBOT.
DR InterPro; IPR000827; CC_chemkine_sml.
DR InterPro; IPR001811; Chemokine_IL8.

DR InterPro; IPR008097; Fractalkine.
DR Pfam; PF00048; IL8; 1.
DR PRINTS; PR01721; FRACTALKINE.
DR SMART; SM00199; SCY; 1.
DR PROSITE; PS00472; SMALL_CYTOKINES_CC; 1.
DR Chemotaxis; Cytokine; Glycoprotein; Inflammatory response; Signal.
FT SIGNAL 1 23
FT CHAIN 24 100 Botaxin.
FT DISULFID 32 57 By similarity.
FT DISULFID 33 73 By similarity.
FT CARBOHYD 94 94 O-linked (GalNAc...) (By similarity).
SQ SEQUENCE 100 AA; 11247 MW; 11F08EC0E75D50B CRC64;

Query Match 64.8%; Score 254; DB 1; Length 100;
Best Local Similarity 66.7%; Pred. No. 3.8e-21;
Matches 46; Conservative 11; Mismatches 12; Indels 0; Gaps 0;

QY 4 IPSACCFRVTKKISFORLKSFKYIIITSSKCPQTAVIVEIKPKMTCADPKKKWQDA 63
DB 28 ISTVCCFNVASRKISFORLQSYRKITSSKCPQKAVIFKTKQAKKICADPKQKWQDAMKY 87
QY 64 LDQISQTTK 72
DB 88 LDQISQTTK 96

RESULT 3
ID BOTR_HUMAN STANDARD; PRT; 97 AA.
AC P51671; P50877; Q92490; Q92491;
DT 01-OCT-1996 (Rel. 34, Created)
DT 01-OCT-1996 (Rel. 34, Last sequence update)
DT 25-OCT-2004 (Rel. 45, Last annotation update)
DE Botaxin precursor (small inducible cytokine A11) (CC111) (Eosinophil
DE chemotactic protein).
GN Name=CC111; Synonyms=SCY111;
OS Homo sapiens (Human).
OC Eukaryota; Metazoa; Chordata; Craniata; Vertebrata; Euteleostomi;
OC Mammalia; Eutheria; Primates; Catarrhini; Hominidae; Homo.
OX NCBI_TaxID=9606;
RN [1]
RP SEQUENCE FROM N.A.
RX MEDLINE=96181758; PubMed=8597956;
RA Garcia-Zepeda B.A., Rothenberg M.E., Ownbey T.R., Leder P.,
RA Lueter A.D.;
RT "Human eotaxin is a specific chemoattractant for eosinophil cells and
RT provides a new mechanism to explain tissue eosinophilia.";
RL Nat. Med. 2:449-456(1996).
RN [2]
RP SEQUENCE FROM N.A.
RX MEDLINE=9618937; PubMed=8609214;
RA Ponath P.D., Qin S., Ringler D.U., Clark-Lewis I., Wang J., Kaassam N.,
RA Smith H., Shi X., Gonzalo J.A., Newman W., Gutierrez-Ramos J.C.,
RA Mackay C.R.;
RT "Cloning of the human eosinophil chemoattractant, eotaxin. Expression,
RT receptor binding, and functional properties suggest a mechanism for
RT the selective recruitment of eosinophils.";
RL J. Clin. Invest. 97:604-612(1996).
RN [3]
RP SEQUENCE FROM N.A.
RC TISSUE=Small intestine;
RX MEDLINE=96205964; PubMed=8631813; DOI=10.1074/jbc.271.13.7725;
RA Kitaura M., Nakajima T., Imai T., Harada S., Combadere C.,
RA Tiliaty H.L., Murphy P.M., Yoshie O.;
RT "Molecular cloning of human eotaxin, an eosinophil-selective CC
RT chemokine, and identification of a specific eosinophil eotaxin
RT receptor, CC chemokine receptor 3.";
RL J. Biol. Chem. 271:7725-7730(1996).
RN [4]
RP SEQUENCE FROM N.A., SEQUENCE OF 60-65 AND 75-88, AND VARIANTS.
RC TISSUE=Foreskin;
RX MEDLINE=96374440; PubMed=8780731; DOI=10.1006/jbrc.1996.1292;
RA Bartels J., Schlueter C., Richter E., Noso N., Kulke R.,

RA Christophers E., Schroeder J.-M.;
 RT "Human dermal fibroblasts express eotaxin: molecular cloning, mRNA
 RL expression, and identification of eotaxin sequence variants";
 RL Biochem. Biophys. Res. Commun. 225:1045-1051(1996).
 [5]
 RP SEQUENCE FROM N.A.
 RC TISSUE=Placenta;
 RX MEDLINE=97312708; PubMed=9169149; DOI=10.1006/geno.1997.4656;
 RA Garcia-Zepeda B.A., Rothenberg M.E., Wermowicz S., Sarati M.N.,
 RA Morton C.C., Luster A.D.;
 RT "Genomic organization, complete sequence, and chromosomal location of
 RT the gene for human eotaxin (SCYA11), an eosinophil-specific CC
 RT chemokine";
 RL Genomics 41:471-476(1997).
 [6]
 RP SEQUENCE FROM N.A.
 RC TISSUE=Lung;
 RX MEDLINE=97445071; PubMed=9299399; DOI=10.1006/bbrc.1997.7169;
 RA Hein H., Schluter C., Kulke R., Christophers E., Schroeder J.-M.,
 RA Bartels J.;
 RT "Genomic organization, sequence, and transcriptional regulation of the
 RT human eotaxin gene";
 RL Biochem. Biophys. Res. Commun. 237:537-542(1997).
 [7]
 RP SEQUENCE FROM N.A.
 RC TISSUE=Lung;
 RX MEDLINE=2238257; PubMed=12477932; DOI=10.1073/pnas.242603899;
 RA Strassberg R.L., Feingold E.A., Grouse L.H., Derge J.G.,
 RA Kleiner R.D., Collins F.S., Wagner L., Shemen C.M., Schler G.D.,
 RA Altschul S.F., Zeeberg B., Buetow K.H., Schaefer C.F., Bhat N.K.,
 RA Hopkins R.F., Jordan H., Moore T., Max S.I., Wang J., Hsieh F.,
 RA Diatchenko L., Marusina K., Farmer A.A., Rubin G.M., Hong L.,
 RA Stapleton M., Soares M.B., Bonaldo M.F., Casavant T.L., Schetz T.E.,
 RA Brownstein M.J., Usdin T.B., Toshiyuki S., Carninci P., Prange C.,
 RA Raha S.S., Loughell N.A., Peters G.J., Abramson R.D., Millaby S.J.,
 RA Bosak S.A., McKernan K.J., Malek J.A., Gunaratne P.H.,
 RA Richards S., Worley K.C., Hale S., Garcia A.M., Gay L.J., Hultik S.W.,
 RA Villalón D.K., Muzny D.M., Sodergren B.J., Lu X., Gibbs R.A.,
 RA Fahy J., Helton B., Kettelman M., Madan A., Rodriguez S., Sanchez A.,
 RA Whiting M., Madan A., Young A.C., Shevchenko Y., Bouffard G.G.,
 RA Blakesley R.W., Touchman J.W., Green E.D., Dickson M.C.,
 RA Rodriguez A.C., Grimwood J., Schmutz J., Myers R.M.,
 RA Butlerfield Y.S.N., Krzywicki M.I., Skalska U., Smalls D.E.,
 RA Scherch A., Schein J.E., Jones S.J.M., Marra M.A.;
 RT "Generation and initial analysis of more than 15,000 full-length human
 RT and mouse cDNA sequences";
 RL Proc. Natl. Acad. Sci. U.S.A. 99:16899-16903(2002).
 [8]
 RP CARBOHYDRATE-LINKAGE SITE.
 RC TISSUE=Blood;
 RX MEDLINE=98237580; PubMed=9578468;
 RA Noso N., Bartels J., Mallet A.I., Mochizuki M., Christophers E.,
 RA Schroeder J.-M.;
 RT "Delayed production of biologically active O-glycosylated forms of
 RT human eotaxin by tumor-necrosis-factor-alpha-stimulated dermal
 RT fibroblasts";
 RL Eur. J. Biochem. 253:114-122(1998).
 [9]
 RP STRUCTURE BY NMR.
 RX MEDLINE=98380469; PubMed=9712872; DOI=10.1074/jbc.273.35.22471;
 RA Crump M.P., Rajaratnam K., Kim K.S., Clark-Lewis I., Sykes B.D.;
 RT "Solution structure of eotaxin, a chemokine that selectively recruits
 RT eosinophils in allergic inflammation";
 RL J. Biol. Chem. 273:22471-22479(1998).
 CC -1- FUNCTION: In response to the presence of allergens, this protein
 CC directly promotes the accumulation of eosinophils, a prominent
 CC feature of allergic inflammatory reactions. Binds to CCR3.
 CC -1- SUBCELLULAR LOCATION: Secreted.
 CC -1- INDUCTION: By TNF-alpha, interleukin-1 alpha and interferon gamma.
 CC -1- PTM: O-linked glycan consists of a Gal-GalNAc disaccharide which
 CC is modified with up to 2 sialic acid residues.
 CC -1- SIMILARITY: Belongs to the intercrine beta (chemokine CC) family.
 CC -1- DATABASE: NMR-Res. Systems' cytokine source book: SCYA11;

CC MM="http://www.indsystems.com/asp/g_sitebuilder.asp?bodyId=196".
 CC -----
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 CC -----
 DR EMBL: U46573; AAA8957.1; -
 DR EMBL: U34780; AAC0369.1; -
 DR EMBL: D49372; BA08370.1; -
 DR EMBL: Z69291; CA93258.1; -
 DR EMBL: Z75668; CA93997.1; -
 DR EMBL: Z75669; CA93998.1; -
 DR EMBL: U46572; AAC1297.1; -
 DR EMBL: Z92709; CAB07027.1; -
 DR EMBL: BC017850; AAH17850.1; -
 DR PIR: UC4912; UC4912.
 DR PDB: 1EOT; NMR; @=24-97.
 DR PDB: 2EOT; NMR; @=24-97.
 DR Genew: HGNC:10610; COL11.
 DR H-invdb: HIT0013715; -
 DR MIM: 601156; -
 DR GO: GO:0008009; F:chemokine activity; TAS.
 DR GO: GO:0006874; P:calcium ion homeostasis; TAS.
 DR GO: GO:0007155; P:cell adhesion; TAS.
 DR GO: GO:0006935; P:chemotaxis; TAS.
 DR GO: GO:0006954; P:inflammatory response; TAS.
 DR GO: GO:0006468; P:protein amino acid phosphorylation; TAS.
 DR GO: GO:0009314; P:response to radiation; TAS.
 DR GO: GO:0009615; P:response to virus; TAS.
 DR GO: GO:0007165; P:signal transduction; TAS.
 DR InterPro: IPR000827; CC chemokine sml.
 DR InterPro: IPR001811; Chemokine_1lb.
 DR Pfam: PF00048; I1b; 1.
 DR PROSITE: PS00472; SMALL_CYTOKINES_CC; 1.
 DR 3D-structure; Chemotaxis; Cytokine; Direct protein sequencing;
 KW glycoprotein; Inflammatory response; Polymorphism; Signal.
 FT SIGNAL 1 23
 FT CHAIN 32 97 Botaxin.
 FT DISULFID 32 57
 FT DISULFID 33 73
 FT CARBOHYD 94 94
 FT VARIANT 7 7
 FT VARIANT 23 23
 FT VARIANT 51 51
 FT VARIANT 79 79
 FT TURN 44 45
 FT STRAND 46 52
 FT STRAND 61 66
 FT TURN 67 68
 FT STRAND 71 74
 FT TURN 76 77
 FT HELIX 79 91
 SQ SEQUENCE 97 AA; 10732 MW; B433C30FDA4C71A7 CRC64;
 Query Match 63.0%; Score 247; DB 1; Length 97;
 Best Local Similarity 62.9%; Pred. No. 2.3e-20;
 Matches 44; Conservative 10; Mismatches 16; Indels 0; Gaps 0;
 QY 4 IPSACFVYTKKTSFQRLKSYKIITSSKCYQTALVEIRKDPKMGADPKKKWVDADKKY 63
 DB 28 VPTTCFPMARNPRLQRLBSYRRTSGCKPQKAVIFETKLAKDIADPKKKWVDQSMKY 87
 QY 64 LDOISQTKRP 73
 DB 88 LDQKSPTRKP 97

```

RESULT 4
BOFA_MACMU          STANDARD;          PRT;          97 AA.
AC  Q8MT17;
DT  05-JUL-2004 (Rel. 44, Created)
DT  05-JUL-2004 (Rel. 44, Last sequence update)
DT  25-OCT-2004 (Rel. 45, Last annotation update)
DE  Eotaxin precursor (Small inducible cytokine A11) (CCL11).
GN  Name=CCL11; Synonyms=SCYA11;
OS  Macaca mulatta (Rhesus macaque).
OC  Eukaryota; Metazoa; Chordata; Craniata; Vertebrata; Euteleostomi;
OC  Mammalia; Eutheria; Primates; Catarrhini; Cercopithecoidea;
OC  Cercopithecinae; Macaca.
OX  NCBI_TaxID=9544;
RN  [1]
RP  SEQUENCE FROM N.A.
RA  Zhang L., Soares M.P., Guan Y., Sirotina-Meisher A.,
RA  Matheravilathu S., Iliff S.A., Mudgett J.S., Springer M.S.,
RA  Daugherty B.L.;
RT  "Molecular cloning of eotaxin/CCL11 and CCR3 from rhesus monkey.
RT  Functional expression and characterization of rhesus monkey CCR3 in
RT  murine L1-2 cells; generation of antibodies against rhesus CCR3.";
RL  Submitted (JUL-2001) to the EMBL/GenBank/DBJ databases.
CC  -i- FUNCTION: In response to the presence of allergens, this protein
CC  directly promotes the accumulation of eosinophils, a prominent
CC  feature of allergic inflammatory reactions. Binds to CCR3 (by
CC  similarity).
CC  -i- SUBCELLULAR LOCATION: Secreted.
CC  -i- SIMILARITY: Belongs to the interleukin beta (chemokine CC) family.
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CC  entities requires a license agreement (See http://www.isb-sib.ch/announce/
CC  or send an email to license@isb-sib.ch).
-----
CC  EMBL; AY049019; AAL13086.1; -
DR  InterPro; IPR000827; CC_chemokine_sml.
DR  InterPro; IPR001811; Chemokine_IL8.
DR  Pfam; PF00048; IL8; 1.
DR  SMART; SM00189; SCY; 1.
DR  PROSITE; PS00472; SMALL_CYTOKINES_CC; 1.
KW  Chemotaxis; Cytokine; Glycoprotein; Inflammatory response; Signal.
FT  SIGNAL          1      23
FT  CHAIN           24      97
FT  DISULFID        32      57
FT  DISULFID        33      73
FT  CARBOHYD        94      94
SQ  SEQUENCE      97 AA; 10855 MW; 9BCA0FD6D95B02DD CRC64;
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Query Match          60.2%; Score 236; DB 1; Length 97;
Best Local Similarity 61.4%; Pred. No. 4,1e-19;
Matches 43; Conservative 10; Mismatches 17; Indels 0; Gaps 0;

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DT  01-OCT-2003 (TREMBLrel. 25, Last annotation update)
DE  Chemokine CCL11/EOXAXIN.
OS  Macaca mulatta (Rhesus macaque).
OC  Eukaryota; Metazoa; Chordata; Craniata; Vertebrata; Euteleostomi;
OC  Mammalia; Eutheria; Primates; Catarrhini; Cercopithecoidea;
OC  Cercopithecinae; Macaca.
OX  NCBI_TaxID=9544;
RN  [1]
RP  SEQUENCE FROM N.A.
RA  Merlie=22123042; PubMed=12126650; DOI=10.1006/cyto.2002.0875;
RA  Basu S., Schaefer T.M., Ghosh M., Fuller C.L., Reinhart T.A.;
RT  "Molecular cloning and sequencing of 25 different rhesus macaque
RT  chemokine cDNAs reveals evolutionary conservation among C, CC, CXCL,
RT  AND CX3C families of chemokines.";
RL  Cytokine 18:140-148(2002).
DR  EMBL; AF449270; AAN76074.1; -
DR  HSSP; P51671; IEOT.
DR  GO; GO:0005576; C:extracellular; IEA.
DR  GO; GO:0008009; F:chemokine activity; IEA.
DR  GO; GO:0006955; P:immune response; IEA.
DR  InterPro; IPR000827; CC_chemokine_sml.
DR  InterPro; IPR001811; Chemokine_IL8.
DR  Pfam; PF00048; IL8; 1.
DR  SMART; SM00189; SCY; 1.
DR  PROSITE; PS00472; SMALL_CYTOKINES_CC; 1.
SQ  SEQUENCE      97 AA; 10795 MW; EDCD4B2880A47C9 CRC64;
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Query Match          60.2%; Score 236; DB 2; Length 97;
Best Local Similarity 61.4%; Pred. No. 4,1e-19;
Matches 43; Conservative 10; Mismatches 17; Indels 0; Gaps 0;

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RESULT 5
O8HXZ5              PRELIMINARY;          PRT;          97 AA.
AC  O8HXZ5;
DT  01-MAR-2003 (TREMBLrel. 23, Created)
DT  01-MAR-2003 (TREMBLrel. 23, Last sequence update)

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RESULT 6
O9TTS6              PRELIMINARY;          PRT;          97 AA.
AC  O9TTS6;
DT  01-MAY-2000 (TREMBLrel. 13, Created)
DT  01-MAY-2000 (TREMBLrel. 13, Last sequence update)
DT  01-JUN-2003 (TREMBLrel. 24, Last annotation update)
DE  Eotaxin.
OS  Bos taurus (Bovine).
OC  Eukaryota; Metazoa; Chordata; Craniata; Vertebrata; Euteleostomi;
OC  Mammalia; Eutheria; Cetartiodactyla; Ruminantia; Pecora; Bovidae;
OC  Bovinae; Bos.
OX  NCBI_TaxID=9913;
RN  [1]
RP  SEQUENCE FROM N.A.
RA  Vogel B., Klinder A., Aust G.;
RL  Submitted (MAY-2002) to the EMBL/GenBank/DBJ databases.
DR  EMBL; AL132003; CAB61617.1; -
DR  HSSP; P51671; IEOT.
DR  GO; GO:0005576; C:extracellular; IEA.
DR  GO; GO:0008009; F:chemokine activity; IEA.
DR  GO; GO:0006955; P:immune response; IEA.
DR  InterPro; IPR001811; Chemokine_IL8.
DR  Pfam; PF00048; IL8; 1.
DR  SMART; SM00189; SCY; 1.
SQ  SEQUENCE      97 AA; 10965 MW; 9E65F23B1DDEB743 CRC64;
-----
Query Match          60.2%; Score 236; DB 2; Length 97;
Best Local Similarity 60.9%; Pred. No. 4,1e-19;
Matches 42; Conservative 13; Mismatches 14; Indels 0; Gaps 0;

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OY  4 IPSACFRVTVNKKISFORLSKYKITTSKCPQTAIVEIRPKDMICADPKKKWQDAKKY 63
    ||: ||| : ||| |||: |||: ||| ||| ||| ||| ||| ||| ||| ||| |||

```

Db 28 IPIICFNNKKKISIORLSYRKITSKCPQKAVIFNTKONKICVDPQEKVQNAWEX 87
Qy 64 IUDISQTTK 72
Db 88 INQKSQTLK 96

RESULT 7

EOTA_RAT STANDARD; PRT; 97 AA.

AC P97545; 008780;
DT 15-JUL-1998 (Rel. 36, Created)
DT 15-JUL-1998 (Rel. 36, Last sequence update)
DT 25-OCT-2004 (Rel. 45, Last annotation update)
DE Eotaxin precursor (Small inducible cytokine A11) (CC11) (Eosinophil chemotactic protein).
GN Name=C111; Synonyms=Scyall1;
OS Rattus norvegicus (Rat).
OC Eukaryota; Metazoa; Chordata; Craniata; Vertebrata; Euteleostomi; Mammalia; Eutheria; Rodentia; Sciurognathi; Muridae; Murinae; Rattus.
NCBI_Taxid=10116;
RN [1]
RP SEQUENCE FROM N.A.
RX MEDLINE=98060832; PubMed=9396866; DOI=10.1007/s002510050345; Williams C.M., Newton D.J., Wilson S.A., Williams T.J., Coleman J.W., Planagan B.P.,
RT "Conserved structure and tissue expression of rat eotaxin."
RL Immunogenetics 47:178-180(1998).
RN [2]
RP SEQUENCE FROM N.A.
RC TISSUE=Lung;
RX MEDLINE=98120437; PubMed=9458816; Ishi Y., Shirato M., Nomura A., Sakamoto T., Uchida Y., Ohtsuka M., Sagai M., Hasegawa S.;
RT "Cloning of rat eotaxin: ozone inhalation increases mRNA and protein expression in lungs of brown Norway rats."
RL Am. J. Physiol. 274:L171-L176(1998).
RN [3]
RP FUNCTION: In response to the presence of allergens, this protein directly promotes the accumulation of eosinophils, a prominent feature of allergic inflammatory reactions (By similarity).
CC -1- SUBCELLULAR LOCATION: Secreted.
CC -1- SIMILARITY: Belongs to the interleukin beta (chemokine CC) family.

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CC EMBL; Y08358; CAA96645.1; -
DR EMBL; U96637; AAB65775.1; -
DR HSSP; P51671; LEOT.
DR InterPro; IPR000827; CC_chemkine_eml.
DR InterPro; IPR001811; Chemokine_IL8.
DR Pfam; PF00048; IL8; 1.
DR PROSITE; PS00472; SMALL_CYTOKINES_CC; 1.
KW Chemokatis; Cytokine; Glycoprotein; Inflammatory response; Signal.
FT SIGNAL 1 23 Potential.
FT CHAIN 1 24 Eotaxin.
FT DISULFID 32 57 By similarity.
FT DISULFID 33 73 By similarity.
FT CARBOHYD 94 94 O-linked (Potential).
SQ SEQUENCE 97 AA; 10851 MW; 77375BA4038B3F6B CRC64;

Query Match 59.8%; Score 234.5; DB 1; Length 97;

Best Local Similarity 63.5%; Pred. No. 6, 1e-19; Indels 1; Gaps 1;

Matches 47; Conservative 9; Mismatch 17; Db 1 HPG-IPSAACCFVTNKKISFORLSYRKITSKCPQKAVIFNTKONKICADPKKKWVOD 59
24 HGSIFTSCTFMTSKKINPTLTKSKYKRTLNRCITLAKAVFKTKGKEICADPKKKWVOD 83

Qy 60 AKYVDOISQTTK 73
Db 84 ATKHLDQKLTQPKK 97

RESULT 8

EOTA_MOUSE STANDARD; PRT; 97 AA.

AC P48298;
DT 01-FEB-1996 (Rel. 33, Created)
DT 01-FEB-1996 (Rel. 33, Last sequence update)
DT 25-OCT-2004 (Rel. 45, Last annotation update)
DE Eotaxin precursor (Small inducible cytokine A11) (CC11) (Eosinophil chemotactic protein).
GN Name=C111; Synonyms=Scyall1;
OS Mus musculus (Mouse).
OC Eukaryota; Metazoa; Chordata; Craniata; Vertebrata; Euteleostomi; Mammalia; Eutheria; Rodentia; Sciurognathi; Muridae; Murinae; Mus.
NCBI_Taxid=10090;
RN [1]
RP SEQUENCE FROM N.A.
RC TISSUE=Lung;
RX MEDLINE=96004658; PubMed=7568052; Rothenberg M.E., Lueter A.D., Leder P.;
RT "Murine eotaxin: an eosinophil chemoattractant inducible in endothelial cells and in interleukin 4-induced tumor suppression."
RL Proc. Natl. Acad. Sci. U.S.A. 92:8960-8964(1995).
RN [2]
RP SEQUENCE FROM N.A.
RC STRAIN=C57BL/6J; TISSUE=Lung;
RX MEDLINE=96158746; PubMed=8574847; DOI=10.1016/S1074-7613(00)80293-9; Gonzalez J.-A., Via G.-S., Aguirre V., Friend D., Coyle A.J., Jenkins N.A., Lin G.-S., Katz H., Lichtenhan A., Copeland N.G., Kopf M., Gutierrez-Ramos J.-C.;
RT "Mouse eotaxin expression parallels eosinophil accumulation during lung allergic inflammation but it is not restricted to a Th2-type response."
RL Immunity 4:1-14(1996).
RN [3]
RP SEQUENCE FROM N.A.
RC STRAIN=B10.S/J; BALB/C; DBA/2J; NOD/LtJ; and SJL/J; TISSUE=Spleen;
RX MEDLINE=99370037; PubMed=10438970; Ma R.Z., Zachary J.F., Doerge R.W., Blaichhorn E.P.;
RT "Sequence polymorphisms in the chemokines Scy1 (TCA-3), Scy2 (monocyte chemoattractant protein (MCP)-1), and Scy3 (MCP-5) are candidates for eae7, a locus controlling susceptibility to monophasic remitting/nonrelapsing experimental allergic encephalomyelitis."
RL J. Immunol. 163:2262-2266(1999).

CC SEQUENCE FROM N.A.
CC STRAIN=C57BL/6J; TISSUE=Tongue;
RX MEDLINE=22354683; PubMed=12466851; DOI=10.1038/nature01266; Okazaki Y., Furuno M., Kasukawa T., Adachi U., Bono H., Kondo S., Nigaki I., Oshio N., Saito R., Suzuki H., Yamanaoka I., Kiyosawa H., Yagi K., Tomaru Y., Hasegawa Y., Nogami A., Schonbach C., Gojobori T., Baldarelli R., Hill D.P., Bult C., Hume D.A., Quackenbush J., Schiml L.M., Kanapin A., Matunda H., Batalov S., Beisel K.W., Blake J.A., Brad D., Busic V., Chochia C., Corbani L.E., Cousins S., Dalla B., Dragani T.A., Fletcher C.F., Forrest A., Frazer K.S., Gaasterland T., Gariboldi M., Gissi C., Godzik A., Gough J., Grimond S., Gustincich S., Hirokawa N., Jackson I.J., Jarvis E.D., Kanai A., Kawaji H., Kawasawa Y., Kedzierski R.M., King B.L., Konagaya A., Kurochkin I.V., Lee Y., Lenhard B., Lyons P.A., Maglott D.R., Maltais L., Marchionni L., McKenzie L., Miki H., Nagashima T., Numata K., Okido T., Pavan W.J., Petrea G., Pesole G., Petrovsky N., Pillai R., Pontius U.U., Qi D., Ramchandran S., Ravasi T., Reed J.C., Reed D.J., Reid J., Ring B.Z., Ringwald M., Sandelin A., Schneider C., Sempile C.A., Setou M., Shimada K., Sultana R., Takenaka Y., Taylor M.S., Teasdale R.D., Tomita M., Verardo R., Wagner L., Wahlestedt C., Wang Y., Watanabe Y., Wells C., Wilming L.G., Wyssh-Boris A., Yanagisawa M., Yang I., Yang L.,

RA Yuan Z., Zavolan M., Zhu Y., Zimmer A., Carninci P., Hayatsu N.,
RA Hitzake-Kishikawa T., Kono H., Nakamura M., Sakazume N., Sato K.,
RA Hitzake T., Waki K., Kawai J., Aikawa K., Aikawa T., Fukuda S.,
RA Hara A., Hashizume W., Imotani K., Ishii Y., Itoh M., Kagawa I.,
RA Miyazaki A., Sakai K., Sasaki K., Shibata K., Shingawa A.,
RA Yasunishi A., Yoshino M., Waterston R., Lander E.S., Rogers J.,
RA Birney E., Hayashizaki Y.,
RT "Analysis of the mouse transcriptome based on functional annotation of
RT 60,770 full-length cDNAs.";
RL Nature 420:563-573 (2002).
[5]
RP SEQUENCE FROM N.A.
RC TISSUE=Mammary gland;
RX MEDLINE=22388257; PubMed=12477932; DOI=10.1073/pnas.242603899;
RX Strusberg R.L., Feingold E.A., Grouse L.H., Derge J.G.,
RA Kleuser R.D., Collins F.S., Wagner L., Sherman C.M., Schuler G.D.,
RA Altschul S.F., Zeeberg B., Buetow K.H., Schaefer C.F., Bhat N.K.,
RA Hopkin R.F., Jordan H., Moore T., Max S.I., Wang J., Hsieh F.,
RA Diatchenko L., Marusina K., Farmer A.A., Rubin G.M., Hong L.,
RA Stapleton M., Soares M.B., Bonaldo M.F., Casavant T.L., Scheetz T.E.,
RA Brownstein M.J., Usdin T.B., Toshiyuki S., Carninci P., Prange C.,
RA Raha S.S., Loggellano N.A., Peters G.J., Abramson R.D., Mullaly S.J.,
RA Boeck S.A., McEwan P.J., McKernan K.J., Malek J.A., Gamaratne P.H.,
RA Richards S., Worley K.C., Hale S., Garcia A.M., Gay L.J., Huiyk S.W.,
RA Villalón D.K., Muzny D.M., Sodergren E.J., Lu X., Gibbs R.A.,
RA Fahy J., Helton E., Kettelman M., Madan A., Rodriguez S., Sanchez A.,
RA Whiting M., Madan A., Young A.C., Shevchenko Y., Bouffard G.G.,
RA Blakeley R.W., Touchman J.W., Green E.D., Dickson M.C.,
RA Rodriguez A.C., Grimwood J., Schmutz J., Myers R.M.,
RA Butlerfield Y.S.N., Krzywinski M.I., Skalska U., Smalins D.E.,
RA Schnerch A., Schein J.E., Jones S.J.W., Marra M.A.,
RT "Generation and initial analysis of more than 15,000 full-length human
RT and mouse cDNA sequences.";
RL Proc. Natl. Acad. Sci. U.S.A. 99:16899-16903 (2002).
[6]
RP SEQUENCE OF 1-14 FROM N.A.
RX MEDLINE=97312708; PubMed=9169149; DOI=10.1006/geno.1997.4656;
RA Garcia-Zepeda E.A., Rothenberg M.E., Weremowicz S., Saraffi M.N.,
RA Morton C.C., Luster A.D.,
RT "Genomic organization, complete sequence, and chromosomal location of
RT the gene for human eosinophil (SCYA11), an eosinophil-specific CC
RT chemokine.";
RL Genomics 41:471-476 (1997).
CC -1- FUNCTION: In response to the presence of allergens, this protein
CC directly promotes the accumulation of eosinophils (a prominent
CC feature of allergic inflammatory reactions), but not lymphocytes,
CC macrophages or neutrophils.
CC -1- SUBCELLULAR LOCATION: Secreted.
CC -1- TISSUE SPECIFICITY: Expressed constitutively in the thymus.
CC Expression inducible in the lung (type I alveolar epithelial
CC cells), intestine, heart, spleen, kidney.
CC -1- INDUCTION: By interferon gamma and lipopolysaccharides (LPS).
CC -1- SIMILARITY: Belongs to the Interleukin beta (chemokine CC) family.
CC
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CC -----
CC EMBL; U26426; AAC52256.1; -;
CC EMBL; U40672; AAA99776.1; -;
CC EMBL; AF128205; AAF22546.1; -;
CC EMBL; AF128206; AAF22547.1; -;
CC EMBL; AF128207; AAF22548.1; -;
CC EMBL; AF128208; AAF22549.1; -;
CC EMBL; AF128209; AAF22550.1; -;
CC EMBL; AK010146; BAB26731.1; -;
CC EMBL; BC027521; AAH27521.1; -;
CC EMBL; U77462; AAC53321.1; -;
CC HSSP; P51671; IBO1.

DR MCD; MGI:103576; Cc11.
DR InterPro: IPR000827; CC chemokine sm1.
DR InterPro: IPR001811; Chemokine_1f8.
DR Pfam; PF00048; 1f8; 1.
DR PROSITE; PS00472; SMALL_CYTOKINES_CC; 1.
KW Chemotaxis; Cytokine; Glycoprotein; Inflammatory response; Signal.
FT SIGNAL 1 23
FT CHAIN 24 97
FT DISULFID 32 57
FT DISULFID 33 73
FT CARBOHYD 94 94
SQ SEQUENCE 97 AA; 10893 MW; 36C9812107FC6A7 CRC64;
Query Match 58.5%; Score 229.5; DB 1; Length 97;
Best Local Similarity 62.2%; Pred. No. 2,3e-18;
Matches 46; Conservative 10; Mismatches 17; Indels 1; Gaps 1;
Oy 1 HPG-IPSAACFRVYTKKISFORLKYKITSKCPQFAIVEIKPDKMICADPKKKWQD 59
DB 24 HPGISPTSCFRIMTSKIPVTLKSYKRTINRCTLKAIYFKTRLGKEICADPKKKWQD 83
Oy 60 AKKILDDISQTKP 73
DB 84 ATKHLDDKLDQTPKP 97
RESULT 9
Oy Q8MKC8 PRELIMINARY; PRT; 99 AA.
AC Q8MKC8;
DT 01-OCT-2002 (TRENBLrel. 22, Created)
DT 01-OCT-2002 (TRENBLrel. 22, Last sequence update)
DT 01-JUN-2003 (TRENBLrel. 24, Last annotation update)
DE Mcd-2.
OS Equus caballus (Horse).
OC Eukaryota; Metazoa; Chordata; Craniata; Vertebrata; Euteleostomi;
OC Mammalia; Euteleostomi; Perissodactyla; Equidae; Equus.
OX NCBI_Taxid=9796;
RN [1]
RP SEQUENCE FROM N.A.
RA Takafuji V.A., Crisman L.V., Crisman M.V., Howard R.D.,
RL Submitted (APR-2002) to the EMBL/GenBank/DBJ databases.
DR EMBL; AF506972; AAM34214.1; -;
DR HSSP; P80075; IBSR.
DR GO; GO:0005576; C:extracellular; IEA.
DR GO; GO:0008009; F:chemokine activity; IEA.
DR GO; GO:0006955; P:immune response; IEA.
DR InterPro: IPR001811; Chemokine_1f8.
DR Pfam; PF00048; 1f8; 1.
DR SMART; SMO0199; SCY; 1.
SQ SEQUENCE 99 AA; 11028 MW; 94F5DBE54089228 CRC64;
Query Match 58.4%; Score 229; DB 2; Length 99;
Best Local Similarity 61.4%; Pred. No. 2,6e-18;
Matches 43; Conservative 8; Mismatches 19; Indels 0; Gaps 0;
Oy 4 IPSACFRVYTKKISFORLKYKITSKCPQFAIVEIKPDKMICADPKKKWQD 63
DB 30 IPTVCCGVDDKVPIDRVESYTRITSSQSQEAVIKTVDEIKCADPKKKWQD 89
Oy 64 LDDISQTKP 73
DB 90 LDDISQTKP 99
RESULT 10
SY08_PIG STANDARD; PRT; 99 AA.
AC P48873;
DT 01-OCT-1996 (Rel. 34, Created)
DT 01-OCT-1996 (Rel. 34, Last sequence update)
DT 05-JUN-2004 (Rel. 44, Last annotation update)
DE Small inducible cytokine A8 precursor (CCL8) (Monocyte chemotactic

RP	SEQUENCE FROM N.A.
RQ	TISSUE=Jugular vein endothelial;
RX	MEDLINE=7176620; PubMed=9024159;
RA	Kumar A.G., Ballantyne C.M., Michael L.H., Kukiela G.L., Youker R.A.,
RA	Lindsey M.L., Hawkins H.K., Birdsell H.H., Mackay C.R., Larosa G.J.,
RA	Rossen R.D., Smith C.W., Britman M.J.;
RT	"Induction of monocyte chemoattractant protein-1 in the small veins of
RT	the ischemic and reperused canine myocardium.";
RL	Circulation 95:693-700(1997).
CC	-1- FUNCTION: Chemotactic factor that attracts monocytes, but not
CC	neutrophils. Important factor in the course of the inflammatory
CC	reaction to reperfusion of the previously ischemic myocardium. May
CC	play a significant role in monocyte trafficking into the
CC	reperused myocardium.
CC	-1- SUBUNIT: Monomer or homodimer; in equilibrium (By similarity).
CC	-1- SUBCELLULAR LOCATION: Secreted.
CC	-1- TISSUE SPECIFICITY: Endothelium of small veins and intrafascicular
CC	veins, and infiltrating leukocytes.
CC	-1- INDUCTION: By TNF-alpha.
CC	-1- SIMILARITY: Belongs to the interleukin beta (chemokine CC) family.
CC	-----
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CC	or send an email to license@ebi.ac.uk).
CC	-----
DR	EMBL; U29653; AAA84911.1; .-
DR	HSSP; P13500; IDOM.
DR	InterPro; IPR000827; CC_chemkine_sml.
DR	InterPro; IPR001811; Chemokine IL8.
DR	InterPro; IPR008097; Fractalkine.
DR	Pfam; PF00048; IL8; 1.
DR	PRINTS; PR01721; FRACTALKINE.
DR	PROSITE; PS00472; SMALL_CYTOKINES_CC; 1.
KW	Chemotaxis; Cytokine; Inflammatory response;
KW	Pyrolicidone carboxylic acid; Signal.
FT	SIGNAL 1 23
FT	CHAIN 24 101
FT	MOD_RES 24 24
FT	DISULFID 34 59
FT	DISULFID 35 75
SO	SEQUENCE 101 AA; 11121 MW; CDD7E2B1901A7267 CRC64;
Query Match 57.1%; Score 224; DB 1; Length 101;	
Best Local Similarity 59.2%; Pred. No. 1e-17;	
Matches 42; Conservative % 12; Mismatches 15; Indels 2; Gaps 1;	
Oy	5 PSACCFVNTTKKTSIFOLKSYYKITTSKCGQTALVEIFEIKDPDKMLCAPPKKKVVDADAKYL 64 31 PVTCGCVLTITTKKISIOFLASYKVYTSKCEPAVIFTIVNKICADPKCKMVDSDMAHL 90
Oy	65 DOIS--QTTKP 73 : Db 91 DKSGQTATAP 101
RESULT 12	
ID 08HYO0	PRELIMINARY; PRT; 99 AA.
AC 08HYO0	
DT 01-MAR-2003 (TREMBLErel. 23, Created)	
DT 01-MAR-2003 (TREMBLErel. 23, Last sequence update)	
DT 01-OCT-2003 (TREMBLErel. 25, Last annotation update)	
DE Chemokine CCL8/MCP-2.	
OS Macaca mulatta (Rhesus macaque).	
OC Eukaryota; Metazoa; Chordata; Craniata; Vertebrata; Euteleostomi;	
OC Mammalia; Eutheria; Primates; Catarrhini; Cercopithecoidea;	
OC Cercopithecinae; Macaca.	
NCBI TaxId=9544;	
OX	

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RN [1]
RP SEQUENCE FROM N.A.
RX MEDLINE=22123042; PubMed=12126650; DOI=10.1006/cyto.2002.0875;
RA Baas S., Schaefer T.M., Ghosh M., Fuller C.L., Reinhart T.A.;
RT "Molecular cloning and sequencing of 25 different rheus macaque
RT chemokine cDNAs reveals evolutionary conservation among C, CC, CXC,
RT AND CX3C families of chemokines."
RL Cytokine 18:140-148(2002).
DR EMBL; AF449269; AAN76073.1; -.
DR HSSP; P80075; 1ESR.
DR GO; GO:0005576; C:extracellular; IEA.
DR GO; GO:0016020; C:membrane; IEA.
DR GO; GO:0008009; F:chemokine activity; IEA.
DR GO; GO:0006955; P:immune response; IEA.
DR InterPro; IPR000827; CC_chemokine_sml.
DR InterPro; IPR001811; Chemokine_IL8.
DR InterPro; IPR008097; Fractalkine.
DR Pfam; PF00048; IL8; 1.
DR PRINTS; PR01721; FRACTALKINE.
DR SMART; SM00199; SCY; 1.
DR PROSITE; PS00472; SMALL_CYTOKINES_CC; 1.
SQ SEQUENCE 99 AA; 11265 MW; 9D6797974A8BF7F CRC64;

Query Match 56.1%; Score 220; DB 2; Length 99;
Best Local Similarity 54.3%; Pred. No. 2.8e-17;
Matches 38; Conservative 15; Mismatches 17; Indels 0; Gaps 0;

QY 4 IPSACCFRYWKKISFORLKSCKPOTATVPEIKDPDKMCA DPKKKWODAKKY 63
DB 30 IPTCCFVYINRKTIYQRLQSTRIITNQCPEANVIFKTKMGKEVCADPKKEWVDSMKH 89
QY 64 LDOIISQITKTP 73
DB 90 LDOIIFQNLKP 99

RESULT 13
SY08 HUMAN STANDARD; PRT; 99 AA.
AC P80075; P78388;
DT 01-DEC-1992 (Rel. 24, Created)
DT 01-NOV-1997 (Rel. 35, Last sequence update)
DT 25-OCT-2004 (Rel. 45, Last annotation update)
DE Small inducible cytokine A8 precursor (CCL8) (Monocyte chemotactic
DE protein 2) (MCP-2) (Monocyte chemoattractant protein 2) (HCL4)
DE [Contains: MCP-2(6-76)].
GN Name=CCL8; Synonyms=MCP2, SCYA10, SCYA8;
OS Homo sapiens (Human).
OC Eukaryota; Metazoa; Chordata; Craniata; Vertebrata; Euteleostomi;
OC Mammalia; Eutheria; Primates; Catarrhini; Hominidae; Homo.
OX NCBI_TaxID=9606;
RN [1]
RP SEQUENCE FROM N.A. AND VARIANT GIN-69.
RX MEDLINE=97237052; PubMed=9119400; DOI=10.1006/geno.1996.4594;
RA van Collie E., Fiten P., Nomiyama H., Sakaki Y., Miura R., Yoshie O.,
RA van Damme J., Opendakker G.;
RT "The human MCP-2 gene (SCYA8): cloning, sequence analysis, tissue
RT expression, and assignment to the CC chemokine gene contig on
RT chromosome 17q11.2."
RL Genomics 40:333-331(1997).
RN [2]
RP SEQUENCE FROM N.A. AND VARIANT GIN-69.
RC TISSUE=Bone marrow;
RX MEDLINE=97224420; PubMed=9070881; DOI=10.1006/dbrc.1997.6177;
RA van Collie E., Froyen F., Nomiyama H., Miura R., Fiten P.,
RA van Aelst I., van Damme J., Opendakker G.;
RT "Human monocyte chemotactic protein-2: cDNA cloning and regulated
RT expression of mRNA in mesenchymal cells."
RL Biochem. Biophys. Res. Commun. 231:726-730(1997).
RN [3]
RP SEQUENCE OF 23-99 FROM N.A.
RX MEDLINE=91207938; PubMed=2518726;
RA Chang H.C., Hsu F., Freeman G.J., Griffin J.D., Reinherz E.L.;

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RT "Cloning and expression of a gamma-interferon-inducible gene in
RT monocytes: a new member of a cytokine gene family."
RL Int. Immunol. 1:388-399(1989).
RN [4]
RP SEQUENCE OF 26-99.
RC TISSUE=Osteosarcoma;
RX MEDLINE=92308855; PubMed=1613466;
RA van Damme J., Proost P., Lenaerts J.-P., Opendakker G.;
RT "Structural and functional identification of two human, tumor-derived
RT monocyte chemotactic proteins (MCP-2 and MCP-3) belonging to the
RT chemokine family."
RL J. Exp. Med. 176:59-65(1992).
RN [5]
RP SUBUNIT.
RX MEDLINE=97053697; PubMed=8898111; DOI=10.1016/0014-5793(96)01024-1;
RA Kim K.-S., Rajarathnam K., Clark-Lewis I., Sykes B.D.;
RT "Structural characterization of a monomeric chemokine: monocyte
RT chemoattractant protein-3."
RL FEBS Lett. 395:277-282(1996).
RN [6]
RP IDENTIFICATION OF MCP-2(6-76), MASS SPECTROMETRY, N-TERMINAL
RP PROCESSING, AND FUNCTION.
RX PubMed=9558113;
RA Proost P., Struyf S., Conyereux M., Lenaerts J.-P., Conings R.,
RA Menten P., Verhaert P., Wuyts A., Van Damme J.;
RT "Posttranslational modifications affect the activity of the human
RT monocyte chemotactic proteins MCP-1 and MCP-2: identification of MCP-
RT 2(6-76) as a natural chemokine inhibitor."
RL J. Immunol. 160:4034-4041(1998).
CC -1- FUNCTION: Chemotactic factor that attracts monocytes, lymphocytes,
CC basophils and eosinophils. May play a role in neoplasia and
CC inflammatory host responses. This protein can bind heparin. The
CC processed form MCP-2(6-76) does not show monocyte chemotactic
CC activity, but inhibits the chemotactic effect most predominantly
CC of CCL7, and also of CCL2 and CCL5 and CCL8.
CC -1- SUBUNIT: Monomer or homodimer; in equilibrium.
CC -1- TISSUE SPECIFICITY: Highest expression found in the small
CC intestine and peripheral blood cells. Intermediate levels seen in
CC the heart, placenta, lung, skeletal muscle, thymus, colon, ovary,
CC spinal cord and pancreas. Low levels seen in the brain, liver,
CC spleen and prostate.
CC -1- INDUCTION: By interferon gamma, mitogens and interleukin-1.
CC -1- PTM: N-terminal processed form MCP-2(6-76) is produced by
CC proteolytic cleavage after secretion from peripheral blood
CC monocytes.
CC -1- SIMILARITY: Belongs to the interleukin beta (chemokine CC) family.
CC -----
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CC -----
DR EMBL; X59886; CAA68168.1; ALT_INIT.
DR EMBL; Y10802; CAA71760.1; -.
DR EMBL; Y16645; CAA76341.1; -.
DR PIR; JC5295; JC5295.
DR PDB; 1ESR; X-ray; A=24-99.
DR Genew; HGNC:10635; CCL8.
DR MIM; 602283; -.
DR GO; GO:0008009; F:chemokine activity; TAS.
DR GO; GO:0004871; F:signal transducer activity; TAS.
DR GO; GO:0006816; P:calcium ion transport; TAS.
DR GO; GO:0007267; P:cell-cell signaling; TAS.
DR GO; GO:0006935; P:chemotaxis; TAS.
DR GO; GO:0006887; P:exocytosis; TAS.
DR GO; GO:0009615; P:response to virus; TAS.
DR GO; GO:0007165; P:signal transduction; TAS.
DR InterPro; IPR000827; CC_chemokine_sml.
DR InterPro; IPR001811; Chemokine_IL8.
DR Pfam; PF00048; IL8; 1.

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DR PROSITE; PS00472; SMALL_CYTOKINES_CC; 1.
 KW 3D-structure; Chemotaxis; Cytokine; Direct protein sequencing;
 KM Heparin-binding; Inflammatory response; Polymorphism;
 KM Pyrrolidone carboxylic acid; Signal.
 FT SIGNAL 1 23
 FT CHAIN 24 99
 FT CHAIN 29 99
 FT MOD_RES 24 24
 FT DISULFID 34 59
 FT DISULFID 35 75
 FT VARIANT 69 69
 FT VARIANT K->Q (in absNP:3138038) .
 FT TURN 26 29
 FT HELIX 45 47
 FT STRAND 48 53
 FT TURN 57 58
 FT STRAND 64 68
 FT TURN 69 70
 FT STRAND 73 76
 FT TURN 78 79
 FT HELIX 81 96
 SQ SEQUENCE 99 AA; 11246 MW; 9D67976B9422F2A CRC64;
 Query Match 55.9%; Score 219; DB 1; Length 99;
 Best Local Similarity 54.3%; Pred. No. 3.7e-17;
 Matches 38; Conservative 14; Mismatches 18; Indels 0; Gaps 0;
 QY 4 IPSACCFVYTNKKISFORLSKYKITSKCPQTAIVFEIKPDKMICADPKKKWVODAKKY 63
 DB 30 IFTCCFVYTNKKISFORLSKYKITSKCPQTAIVFEIKPDKMICADPKKKWVODAKKY 89
 QY 64 LDQISQTKP 73
 DB 90 LDQIFQNLKP 99
 RESULT 14
 ID SY02_MACPA STANDARD; PRT; 99 AA.
 AC P61274; Q9MYN4;
 DT 16-OCT-2001 (Rel. 40; Created)
 DT 16-OCT-2001 (Rel. 40; Last sequence update)
 DT 05-JUN-2004 (Rel. 44; Last annotation update)
 DE Small inducible cytokine A2 precursor (CCL2) (Monocyte chemotactic protein 1) (MCP-1) (Monocyte chemoattractant protein-1).
 GN Name=CCL2; Synonyms=MCP1, SCYA2;
 OS Macaca fascicularis (Crab eating macaque) (Cynomolgus monkey).
 OC Eukaryota; Metazoa; Chordata; Craniata; Vertebrata; Euteleostomi; Mammalia; Eutheria; Primates; Catarrhini; Cercopithecoidea; Cercopithecinae; Macaca.
 OC NCBI_TaxID=9541;
 RN [1]
 RP SEQUENCE FROM N.A.
 RA Studer C., Uffer R.;
 RT "Cloning and expression of cynomolgus monkey chemoattractant protein-1."
 RL Submitted (JUN-2000) to the EMBL/GenBank/DBJ databases.
 CC -1- FUNCTION: Chemotactic factor that attracts monocytes and basophils but not neutrophils or eosinophils. Binds to CCR2 and CCR4 (By similarity).
 CC -1- SUBUNIT: Monomer or homodimer; in equilibrium (By similarity).
 CC -1- SUBCELLULAR LOCATION: Secreted.
 CC -1- SIMILARITY: Belongs to the interleukin beta (chemokine CC) family.
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 CC EMBL; AF276081; AAF81899.1; -.

DR HSSP; P13500; IDOK.
 DR InterPro; IPR000827; CC_chemokine_sml.
 DR InterPro; IPR001811; Chemokine_IL8.
 DR InterPro; IPR008097; Fractalkine.
 DR PRINTS; PR01721; Fractalkine.
 DR SMART; SM00199; SCY; 1.
 DR PROSITE; PS00472; SMALL_CYTOKINES_CC; 1.
 KW Chemotaxis; Cytokine; Inflammatory response;
 KM Pyrrolidone carboxylic acid; Signal.
 FT SIGNAL 1 23
 FT CHAIN 24 99
 FT MOD_RES 24 24
 FT DISULFID 34 59
 FT DISULFID 35 75
 FT CARBOHYD 37 37
 SQ SEQUENCE 99 AA; 11007 MW; 433CB88C64E87A4F CRC64;
 Query Match 55.6%; Score 218; DB 1; Length 99;
 Best Local Similarity 58.0%; Pred. No. 4.8e-17;
 Matches 40; Conservative 11; Mismatches 18; Indels 0; Gaps 0;
 QY 5 PSACCFVYTNKKISFORLSKYKITSKCPQTAIVFEIKPDKMICADPKKKWVODAKKY 64
 DB 31 PVTCCFVYTNKKISFORLSKYKITSKCPQTAIVFEIKPDKMICADPKKKWVODAKKY 90
 QY 65 DQISQTKP 73
 DB 91 DQIQTPKP 99
 RESULT 15
 ID SY02_MACMU STANDARD; PRT; 99 AA.
 AC P61275; Q9MYN4;
 DT 16-OCT-2001 (Rel. 40; Created)
 DT 16-OCT-2001 (Rel. 40; Last sequence update)
 DT 05-JUN-2004 (Rel. 44; Last annotation update)
 DE Small inducible cytokine A2 precursor (CCL2) (Monocyte chemotactic protein 1) (MCP-1) (Monocyte chemoattractant protein-1).
 GN Name=CCL2; Synonyms=MCP1, SCYA2;
 OS Macaca mulatta (Rhesus macaque).
 OC Eukaryota; Metazoa; Chordata; Craniata; Vertebrata; Euteleostomi; Mammalia; Eutheria; Primates; Catarrhini; Cercopithecoidea; Cercopithecinae; Macaca.
 OC NCBI_TaxID=9544;
 RN [1]
 RP SEQUENCE FROM N.A.
 RA Studer C., Uffer R.;
 RT "Cloning and expression of rhesus monkey monocyte chemoattractant protein-1."
 RL Submitted (APR-2000) to the EMBL/GenBank/DBJ databases.
 CC -1- FUNCTION: Chemotactic factor that attracts monocytes and basophils but not neutrophils or eosinophils. Binds to CCR2 and CCR4 (By similarity).
 CC -1- SUBUNIT: Monomer or homodimer; in equilibrium (By similarity).
 CC -1- SUBCELLULAR LOCATION: Secreted.
 CC -1- SIMILARITY: Belongs to the interleukin beta (chemokine CC) family.
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 CC EMBL; AF255343; AAF67756.1; -.
 DR HSSP; P13500; IDOK.
 DR InterPro; IPR000827; CC_chemokine_sml.
 DR InterPro; IPR001811; Chemokine_IL8.
 DR InterPro; IPR008097; Fractalkine.
 DR PRINTS; PR01721; Fractalkine.

DR SMART; SM00199; SCY, 1.
 DR PROSITE; PS00472; SMALL CYTOKINES; CC; 1.
 KW Chemotaxis; Cytokine; Inflammatory response;
 KW Pyrrolidone carboxylic acid; Signal.
 FT SIGNAL 1 23 By similarity.
 FT CHAIN 24 99 Small inducible cytokine A2.
 FT MOD_RES 24 24 Pyrrolidone carboxylic acid (By
 similarity).
 FT DISULFID 34 59 By similarity.
 FT DISULFID 35 75 By similarity.
 FT CARBOHYD 37 37 N-linked (GlcNAc...) (potential).
 SQ SEQUENCE 99 AA; 11007 MW; 433CB88C64E77A4F CRC64;

Query Match 55.6%; Score 218; DB 1; Length 99;

Best Local Similarity 58.0%; Pred. No. 4.8e-17;
 Matches 40; Conservative 11; Mismatches 18; Indels 0; Gaps 0;

OY 5 PSACCFRVTNKKISFQRLKSKITSSKCPQTAIVFEIKPDMICADPPKKKVVQDAKKYL 64
 Db 31 PVTCCYNFTNRRKISVQRLASYYRRTSSKCPKEAVIFKTIYAKETICADPPKKKVVQDSMDHL 90

OY 65 DOISSQTTKP 73
 Db 91 DKQIQTPKP 99

Search completed: August 29, 2005, 20:35:29
 Job time : 174 secs